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PAPER TRADE JOURNAL

With Which Is Combined

PAPER

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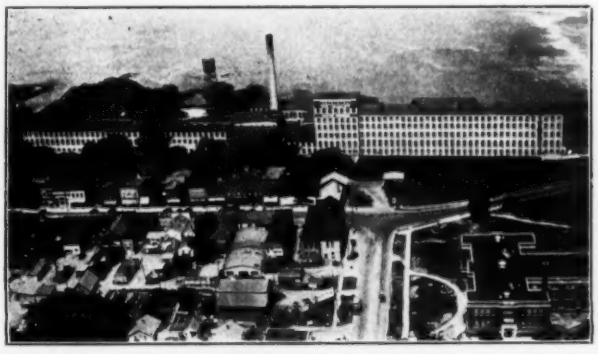
Nicolet Paper Co. Reorganization Completed

Assets of Former Company Taken Over and Organization Placed In Strong Position — De Pere Mill Will Continue to Manufacture Glassine and Grease-Proof Papers—Arthur T. Brown Will Remain As General Manager of Old American Writing Plant—Mill Situated On One of Most Advantageous Fox River Sites

DE PERE, Wis., February 23, 1931—The Nicolet Paper Corporation of De Pere, Wis., was organized on February 1 and the following officers were elected: C. B. Clark, Neenah, President; H. B. Kuhns, Chicago, vice-president; A. Brown, De Pere, treasurer; E. J. Dempsey, Oshkosh, secretary.

The board of directors, in addition of the above, includes W. C. Wing, Neenah; F. E. Ballister, Neenah; Mowry Smith, Menasha; Paul Bushong, Gladstone, Mich.



PLANT OF THE NICOLET PAPER CORP.

All of these men have been identified with the paper and allied industries for many years. Mr. Clark is president of the Riverside Paper Corporation, Appleton, and a director of the Kimberly Clark Corporation, Neenah, Mr. Wing is president of the Fox River Paper Company, Appleton; and Mr. Brown for the last several years has been manager of the Nicolet Paper Company.

The new corporation recently acquired the assets and properties of the Nicolet Paper Company, and is continuing the manufacture of glassines, greaseproofs and related papers. Organized under the laws of Wisconsin, the corporation has an authorized capitalization of $400,000, consisting of 2000 shares each of common and preferred stock.

The mill itself is a two machine plant, located at the mouth of the famous Fox on one of the most advantageous sites on the entire river. In addition to unexcelled water power facilities, the further advantage of dockage for lake steamers permits the receipt of raw materials without extra handling. Situated in the heart of the Fox River Valley paper making section, the mill is in a favorable position to make pool car shipments with other firms. This location also insures a permanent supply of skilled labor for the manufacture of high grade products.

C. E. Beecher, general superintendent of the plant, is one of the first makers of glassine papers in the country, and with the new modern facilities of the Nicolet Paper Corporation at his command, is reported to be producing papers of exceptional quality.

Finds No Dumping of Board From Quebec

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 25, 1931—Secretary of the Treasury, A. W. Mellon, has signed an order finding no dumping of fiber board on the United States market from the Province of Quebec, Canada. The order follows the usual investigation. The Secretary's letter to the collectors on the subject is as follows:

Under the provisions of Section 201 (b) of the Antidumping Act of May 27, 1921, appraisements have been withheld on entries covering fiber board imported from the Province of Quebec, Canada.

Investigation has failed to establish that the fiber board industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of the fiber board in question. Therefore, I find that fiber board from the Province of Quebec, Canada, is not being dumped on the United States market in contravention of the provisions of the Antidumping Act.

Customs officers are authorized and directed to proceed with appraisement and liquidation of entries of fiber board imported from the Province of Quebec, Canada, as though no suspicion of dumping had developed.

St. Regis to Make Sacks at Seattle

SEATTLE, Wash., February 21, 1931—The St. Regis Paper Company will manufacture paper sacks for cement and other products in a new factory and warehouse building in Seattle which will be built by the Austin Company at a cost of $30,000. The structure, which will be 140 by 148 feet, one story high, will be owned by the Elliott Bay Mill Company and leased to the paper company.

Activities of Fox River Valley Paper Mills

Riverside Paper Corp., Begins Construction of Warehouse Addition at Appleton, Wis.—Flambeau Paper Co. Faces Power Supply Problem At Park Falls, Due to Lack of Sufficient Rain and Snow—J. M. Conway Re-Elected Head of Hoberg Company.

APPLETON, Wis., February 23, 1931—Outstanding success has been achieved by the Institute of Paper Chemistry of Lawrence College, Appleton, Wis., in its first year of existence. The semster just closing brings the institute to its first anniversary. Fifteen students, graduates from educational institutions in all parts of the United States have been studying there. These were selected from a large list of applicants. A larger number probably will be accommodated during the next year, especially after the new building now in contemplation has been erected.

The institute has had the three-fold purpose of training men for the field of pulp and paper chemistry, establishing a comprehensive library service, and promoting research projects of importance to the paper industry. Ninety per cent of the paper manufacturers of Wisconsin are supporting the institute, which has an annual appropriation of $60,000.

Courses leading to the degree of master of science in paper technology are now offered, and include participation in the three-fold program. Research problems count as class work, including those initiated at the request of paper mills. Every student is a candidate for a master's or doctor's degree, and therefore is required to prepare a thesis, many times on a subject assigned by a mill. Progress of the institute has exceeded all expectations.

Kimberly-Clark Earnings Decline

A decline in net earnings of approximately $800,000 is shown in the preliminary report of the Kimberly-Clark Corporation, Neenah, Wis. The net for 1930 was $3,011,357, after all charges, including bond interest and federal taxes. The profit is equal, after six per cent preferred stock dividends, to $4.82 a share on 499,800 shares of common stock. In 1929 the company had a net of $3,872,156, or $6.54 a share.

Warehouse Addition for Riverside

Construction of a warehouse addition which will provide 3,000 square feet of additional paper storage has been started by the Riverside Paper Corporation, Appleton, Wis., according to announcement of E. C. Hilfert, general manager. The building will be 47 by 60 feet, of brick construction, and one story high. The cost is about $6,000. C. R. Meyer & Sons Co. was awarded the contract.

Hoberg Elects Officers

J. M. Conway was re-elected president of the Hoberg Paper and Fibre Company, Green Bay, Wis., at the annual meeting held recently. Reports showed a successful year in 1930 despite the general depression, and a highly favorable outlook for 1931. Directors re-elected are: Dr. Charles A. Albright and J. A. Auchter, Milwaukee; W. Y. C. Hunt and Thomas J. Dee, Chicago; C. R. Phenicie, William Hoberg, J. M. Conway, F. T. Ramsay and Dr. J. R. Hinahan, Green Bay. Mr. Dee was re-elected vice president. Mr. Ramsay was elected vice-president and treasurer, and H. G. Wintgens vice president and sales manager. E. A. Clancy was promoted to secretary and assistant treasurer. John Maloney, formerly manager of the Chicago office, and George E. Farrow, Cleveland representative, were made assistant sales managers.

Safety Schools Well Supported

Safety schools at Marinette, Green Bay, Appleton and Neenah-Menasha, Wis., are drawing a large attendance and are making preparations for their windup banquets. The speaker at the last meeting at Neenah was D. D. Fennell, of Chicago, who paid high tribute to S. F. Shattuck, vice president of the Kimberly-Clark Corporation, Neenah, Wis., for his pioneering efforts in safety work. Nathan Bergstrom, of the Bergstrom Paper Co., acted as chairman. At Marinette, Dr. Ernest Corn, of Chicago, spoke on "Are We Fit for Our Jobs?" He stressed establishment of pride and confidence in the institution with which one is employed. The last meeting at Green Bay had as its speaker F. M. Kreml, of Evanston, Ill., who dealt with the subject of traffic safety. This week, Major Norman A. Imrie is to speak at Appleton.

News of the Industry

Because of the lack of rain and snow during the last nine months, the Flambeau Paper Company, Park Falls, Wis., and others in that vicinity, are undergoing a serious problem in the matter of power supply. The lack of water in the Turtle River dam at the head waters of the Flambeau River has caused a reduction to 25 per cent of the normal power supply from this source. Power is now being furnished by the Lake Superior District Power Company in order to keep the mills operating.

The boarding hotel and club house owned by the Wausau Paper Mills Co. at Brokaw, Wis., was burned to the ground recently by fire caused from a defective chimney. The loss was about $10,000.

Opposition is being offered by the Wisconsin Paper and Pulp Manufacturers Traffic Association to the attempt of mines to secure an increase in shipping rates on coal. The Pittsburgh mines enjoy a differential of 35 cents a ton over southern mines and the south is asking the Interstate Commerce Commission to wipe this out. The change would have a serious effect on fuel costs among Wisconsin mills, it is contended.

Reopening of the question of rates on paper board granted by the Interstate Commerce Commission has been asked by the United Paperboard Company. The company contends that Wisconsin mills enjoy an undue advantage, especially in the Fox River Valley, in shipments to the Chicago and St. Paul markets. New rates granting reductions to Wisconsin mills go into effect April 1, 1931, and the company wants a hearing before that time to set them aside. In another petition, the Badger Paper Mills, Peshtigo, Wis., ask a refund of $10,000 from various carriers for excessive rates on pulpwood.

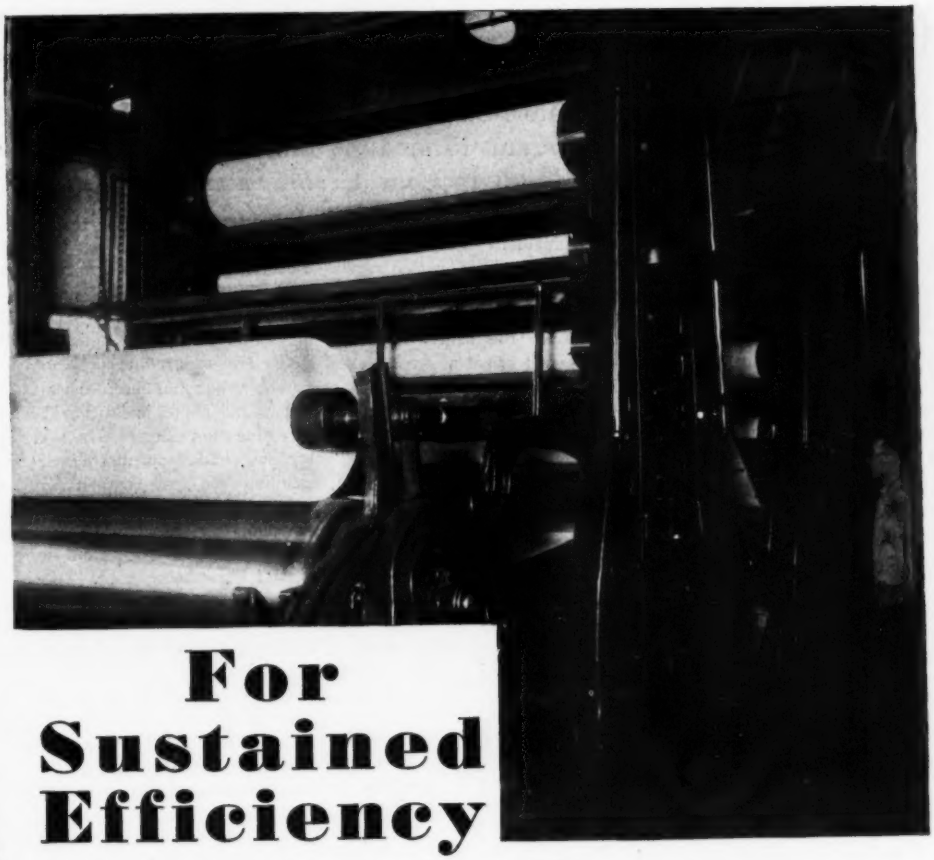
The Little Rapids Pulp Company, Little Rapids, Wis., lost out in a suit brought by John P. Kline, of Kaukauna, Wis., pulpwood buyer. Kline claimed he had an oral contract with the company to supply wood, and in return for this had bought fifty shares of common stock and fifteen of preferred in the company. He asked damages of $6,700. The jury decided Kline had a contract, and the amount of damages is to be fixed by the judge.

Inheritances taxes of $82,075.85 have been paid to the State of Wisconsin on the estate of the late A. W. Priest, of Appleton, Wis., former paper manufacturer. He left an estate of about $900,000.

D. Clark Everest, vice-president and general manager of the Marathon Paper Mills Company, has been elected as vice-president of the Wisconsin Manufacturers Association. The association also elected to its board of directors J. M. Conway, president of the Hoberg Paper and Fibre Company.

Hugh Strange, secretary-treasurer of the John Strange Paper Company, Menasha, Wis., has been named a member of the central committee of paper board manufacturers of the United States, to minimize unemployment within the industry.

Mrs. J. A. Kimberly, widow of the founder of the Kimberly-Clark Corporation, Neenah, Wis., has been seriously ill at Redlands, Cal., but is reported to be recovering.



For Sustained Efficiency

put a Vickery Doctor on every roll

The stack shown above, like scores of other stacks in the country's foremost mills, is kept at peak efficiency by Vickery Doctors. Rolls are continuously clean; rarely require regrinding. Paper finish is uniform. And the Doctors themselves are automatic; they require no adjustments whatever.

Let us put a Vickery Doctor on one of your rolls. Try it at our expense.

BIRD MACHINE COMPANY
South Walpole • • Massachusetts

The Vickery Doctor

4635

Canadian Papers to Consume Less News Print

Effective March 15, All Toronto Newspapers, Together With Southern Chain of Papers, Are to Reduce Width of Their Columns From 12½ Ems to 12 Ems—Publishers Anticipate Movement Will Result In Considerable Saving on Overhead

[FROM OUR REGULAR CORRESPONDENT]

MONTRAL, Que., February 23, 1931—Canadian newspapers are taking steps to reduce their consumption of news print, with a view to recovering in some measure the loss of revenue through a smaller volume of advertising. For instance, effective on March 15, all the Toronto newspapers are reducing the width of their columns from 12½ ems to 12 ems. This will effect a saving not only upon news print, but also upon ink, postage, etc., the total saving being estimated at from 4½ to 6 per cent, of which 4 per cent will be in news print. One newspaper estimates that it will save around $40,000 a year on news print, and a saving of another $40,000 a year in news print is to be made by one paper by cutting out returns from news vendors, these returns having been found to use up that amount of news print.

The circulations of the Toronto newspapers affected are as follows:

Daily	Circulation
Globe	101,092
Mail & Empire	117,551
Star	192,198
Telegram	149,847
Total Daily	551,688
Weekly	
Star	216,735

The Southam chain of papers is also changing to 12 ems, with one or two temporary exceptions. The Southam papers are:

Daily	Circulation
Hamilton Spectator	40,437
Ottawa Citizen (Morn. & Eve.)	33,566
Calgary Herald	30,277
Vancouver Province	90,749
Winnipeg Tribune	39,132
Edmonton Journal	31,554
Total Daily	265,715
Weekly	
Vancouver Sunday Province	91,450

It is estimated that last year the total news print requirements of Canadian publishers amounted to 173,000 tons, as against 218,000 tons in 1929. Estimated at $55 per ton, this would mean that Canadian publishers last year bought news print to the value of $9,515,000, as compared with $12,990,000 in 1929, a drop of $3,475,000.

Anticosti Corp. Defers Dividend

Anticosti Corporation has deferred the regular quarterly dividend on its preferred stock ordinarily payable on March 1 next.

This company forms part of the set-up of Canada Power and Paper Corporation, being controlled through ownership of all of the common stock by the latter's subsidiaries, St. Maurice Valley Corporation, Wayagamack Pulp and Paper Company and Port Alfred Pulp and Paper Corporation.

It was formed four years ago to take over the Island of Anticosti, on which the pulpwood stand was estimated at 15,000,000 cords. At the end of 1929, Anticosti had outstanding $5,763,500 of bonds, $3,000,000 of preferred, and 60,000 shares of no par value common.

Dominion Engineering Reduces Dividend

Dominion Engineering Works, of Montreal, has just declared a quarterly dividend of 60 cents per share. Formerly the rate was $1 per share. It is stated that the earnings have been reduced through lack of orders in the paper-making machinery department, which heretofore has provided a large proportion of the company's output, and business in new lines has not yet developed in sufficient volume to warrant maintaining the previous rate of distribution.

Speaks Against Russian Pulpwood Embargo

[FROM OUR REGULAR CORRESPONDENT]

CARTHAGE, N. Y., February 23, 1931.—A protest against the latest order of the government in placing a ban on Russian pulpwood shipments was made by Samuel S. Shipman, a representative of the Amtorg Trading Company, in an address before local business men. He declared that the only evidence obtained to show that convict labor has been used is gossip, rumors and anonymous letters and there has never been anything definitely established regarding the matter. He said that he did not know what new evidence had been discovered but it is his opinion that those handling the investigation will be unable to present anything substantial.

"Numerous American paper manufacturers have visited our timberlands," he said, "and they have never seen any signs of convict labor being used. It will be interesting to see just what the labor department will be able to bring out. The motive behind the entire campaign to stop Russian lumber and pulpwood from coming into this country is not based on economic grounds but is an effort of trying to stop Soviet trade. This country needs the supply of pulpwood and lumber that is coming from Russia and I sincerely hope that the government will reverse the order the same as was done last summer."

Mr. Shipman also pointed out that the Dexter Sulphite Pulp and Paper Company was receiving large quantities of the pulpwood from Russia because it was the only source of raw material that could be depended upon. He also called attention to the testimony given by George W. Sisson, Jr., president of the Raquette River Paper Company, before government officials saying that the foreign importations were needed by the paper industry because a supply could not be obtained in this country. Mr. Sisson declared also that the new source of supply was very welcome.

Reservoir Proves Usefulness

The gigantic Conklingville Reservoir has already proven of great benefit in controlling the waters of the Hudson River besides supplying an increased flow of water power for numerous paper mills and other industries in Northern New York. Extreme low water in the Upper Hudson within the past few months has surpassed all previous records and it is claimed by officials of the Hudson River Regulating Board that a serious situation was averted only through using the storage waters in the big reservoir. By bringing into play the impounded waters it is claimed that many of the large industrial and power plants have been allowed to operate during the recent drought period when otherwise the abnormally low flow in the Hudson would have necessitated shutdowns.

Officials of Finch, Pruyn & Co. recently commended the good results already obtained from the reservoir and said that a large number of men would have been idle in recent months if the needed water power had not been available. Among the other concerns deriving benefits from the project are the West Virginia Pulp and Paper Company, Mechanicville; Warren Curtis Company, Corinth; Iroquois Paper and Pulp Company and United Boxboard Company, Northumberland; Union Bag and Paper Company, Hudson Falls; International Paper Company, with plants at Palmer Falls, Sherman Island, Glens Falls, Fort Edward; Moreau Manufacturing Company, Glens Falls, and the New York Power and Light Company, Mechanicville. All of these concerns have been assessed certain sums yearly in aiding to defray the huge sum involved in the construction of the reservoir.

WRITE YOUR NAME AND ADDRESS ON THE MARGIN OF THIS PAGE AND MAIL IT TO US FOR A CATALOG

A news mill repaid the cost of its Downingtown Suction Roll installation at the end of seven months. They installed two rolls in 1925, therefore the rolls have paid dividends for more than four years, and are still running. The design and construction of the Downingtown Roll safeguards the economies derived from the suction roll operating principle. A complete 24 page catalog sent upon request.

Downingtown Manufacturing Co.
Downingtown, Penna., U. S. A.

DOWNINGTON
KILBERRY PATENT
SUCTION ROLL
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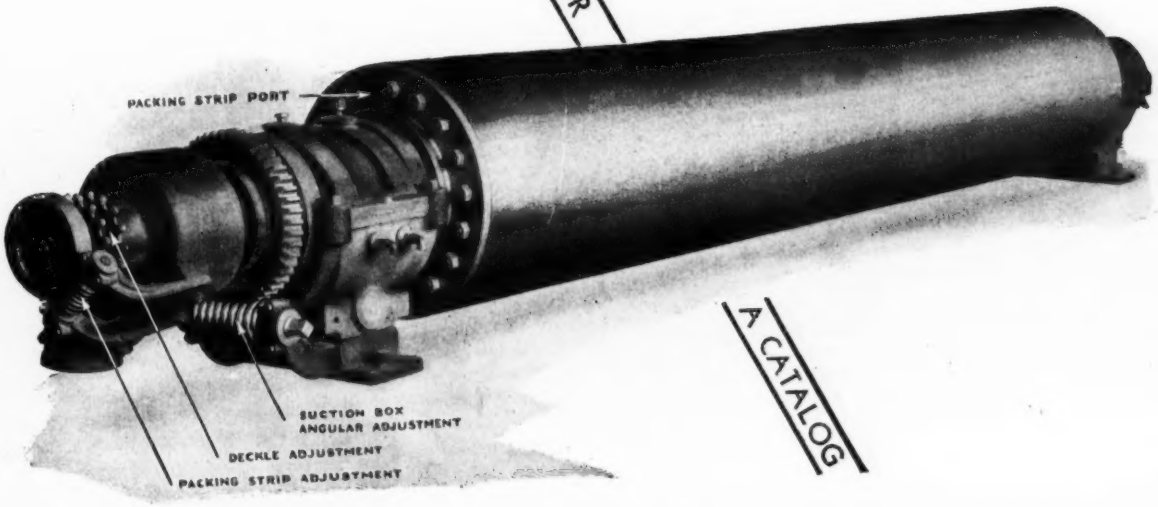


Chicago Paper Market Displays Better Trend

Fine Paper Division Exhibits Stronger Undertone Than of Late, With Prices Fairly Steady, and Outlook For Future Brighter—Book and Cover Papers Only Slightly Less Buoyant—Coarse Paper Market Still In Unsatisfactory Position

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., February 21, 1931—A much improved tone is prevalent in the Chicago paper market at this time. The improvement is noted in the finer papers and reports indicate that the coarser the paper the less the improvement has been. Fine papers in general have shown a turn for the better with the market steady and prospects somewhat improved for the Spring months. Book and cover papers, while said to be slightly less buoyant than the very fine grades, are improving somewhat here. In the news print market, with contracts taken care of, the trouble is reported to be in decreased lineage in newspapers which should be bettered when the business turn is finally made.

The kraft market is reported to be in a very unsatisfactory condition. The extremely low prices caused by the last serious cut two weeks ago are making the market decidedly nervous and there is some report of even a further cut before the market reaches that bottom from which it can start a long upward climb. The board market is bending its efforts to co-operation in working out over production that has hampered its betterment. The efforts are proving fruitful and the curtailed production plus constantly increasing uses for board may be the needed tonic, say board representatives.

Coarse Paper Situation Discussed

The Chicago Paper Association held a special meeting at the Bismarck Hotel on Tuesday evening, February 17, for the purpose of discussing ways and means of stabilizing the coarse paper market in Chicago. The meeting, which takes the place of the regular meeting to have been held February 24, was made necessary because of the continued depression of krafts and bags and, according to the report from the association, had the effect of demoralizing the jobber trade to a certain extent. With business itself on only a very slowly improving basis, making normal activity very slow, the continued price cutting was approaching the point where special action might be necessary. Accordingly, the association, at its meeting, urged all members to make every effort to retain the high plane of business ethics which the association has always stood for and urged individual members to do everything within their power to stabilize the market as the first step in any business improvement. "The price will not go up," says a report, "until buyers are convinced that it will not again go down. Stabilization is necessary to get buyers into the market in any quantity."

Power Engineering Exposition

Approximately $1,000,000 worth of the latest machines and appliances of interest to the manufacturing and engineering world were on display at the Coliseum, February 10 to 14, during the fifth Midwest Power Engineering Conference. The exhibits, which attracted 250 of the leading manufacturers, were held in conjunction with the meeting of the American Society of Mechanical Engineers and allied groups. For the first time at any show a boiler and stoker were in operation eight hours daily burning low grade coal to demonstrate how such fuel can be burned smokelessly and economically with the aid of modern equipment.

Creation and distribution of electric and steam power, modern engineering features, the effects of power on the progress of modern civilization, air pollution, refrigeration in air conditions and other phases of power and power production attracted large crowds to Chicago's Coliseum where the Exposition was held. Paper manufacturers were in evidence at the exhibits, interested in the application of new devices designed to lower the costs of production through economical power and increased efficiency.

News of the Trade

Chicago members of the Salesmen's Association of the Paper Industry and the paper distributors themselves are evidencing genuine pleasure over the election of Harold Knott, of the Eastern Manufacturing Company, to the presidency of the national association to succeed Sam Knode of Albemarle. The election of Creighton Whiting of the American Writing Paper Company to the office of district vice-president was also a happy choice.

H. C. Campbell, formerly general sales manager of the Robert Gair Company, New York, has joined the Morris Paper Mills, Inc., of Chicago. He will have charge of the distribution of a new single service can developed by the Morris Paper Mills and now being introduced into the ice cream business for bulk ice cream.

Westvaco Inspirations for Printers, No. 62, makes its appearance this week, featuring brush, pen and camera treatments of advertising; giving some striking examples of distinctive picture treatments to meet difficult advertising situations and outlining to the interested creators of advertising the charm of feminine appeal enhanced by color. "Unique Compositions In Strong Contrasts" also provides an interesting discussion, aptly illustrated, which is a distinct service to the advertising buyer and printer.

Another Chicago distributor, Bermingham & Prosser, continues an interesting series on Oxford Papers with the latest direct mail piece on "Oxford Papers and Modernism." The illustrations are, of course, strikingly modern to meet the text which speaks of the force of modernism but bespeaks the fact that paper must be standardized and must conform to materials, method, finish and price.

"The Story of a Raised Check" is told in interesting fashion by the Gilbert Paper Company through the Empire Paper Company, Chicago distributors. Quite naturally the "story" includes a discussion of Gilbert Safety Bond, a rag content bond of unusual durability and strength, readibility, flexibility and safety features. The same mailing from Empire also includes a featured blotter—"Ivory Half Tone Blotting"—described by the distributors as practically "lintless and highly absorbent on both sides."

Boston Paper Trade Happenings

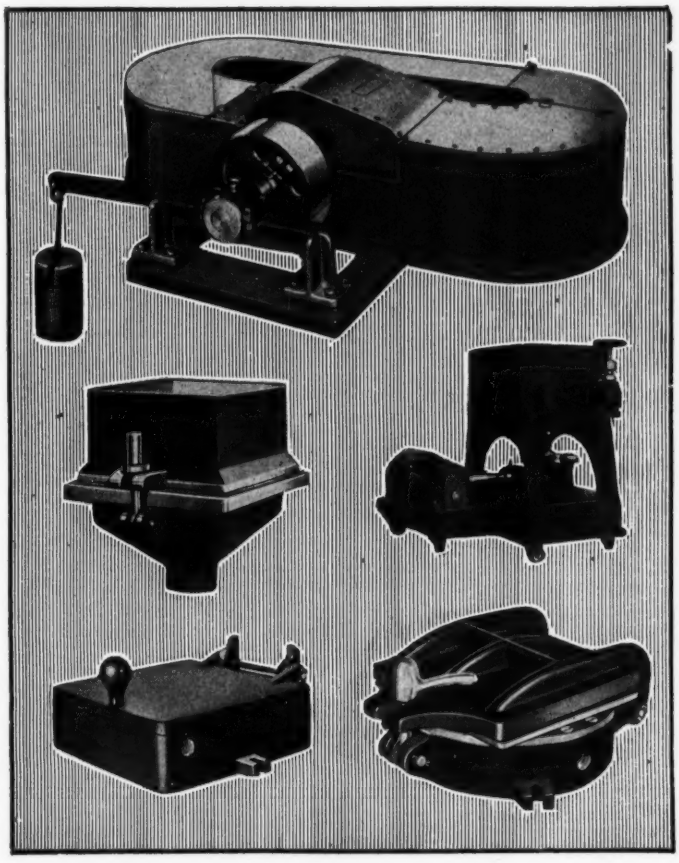
BOSTON, Mass., February 23, 1931—H. L. Goodman is putting on the market Perfection Tissue Ribbon, made on a strong Japanese tissue to take the place of regular tying ribbon for gift packages. The ribbon is manufactured by the Royal Card and Paper Company, New York City, whom Mr. Goodman represents.

The New York-New England Company, Holyoke, Mass., for whom Mr. Goodman is agent, is shipping a large quantity of velours paper and Bristols in various weights, a number with gold and silver backs. There are some very handsome samples, printed from the new rubber plate process.

Development of Timber In Wisconsin

In furtherance of the preserving of Wisconsin forests, the Wisconsin Conservation Commission has accepted 139,355 acres for entry under the state forest crop law. This brings the total to 420,000 acres in 27 counties, set aside for the development of timber. No property taxes are assessed against these areas until the timber is cut.

YOUR CHEMIST—



will be more valuable when he uses the latest type equipment

Your chemist . . . and your laboratory . . . are directly related to your profits.

The income you will be making six months and a year from now have an important bearing upon the research work you are doing now to improve your present products and develop new ones.

Your easiest and best profits are made on new and better products which are not thwarted by the pressure of competition.

The success of such effort depends upon the equipment your chemist has to work with. He must have the major operations of a *complete* mill at his finger tips. He must have the necessary facilities to properly iron out all the kinks of production *before* the run is put through the mill. Your mill cannot afford to carry on your experimental work.

If your laboratory is not complete . . . if it is not a modern, miniature mill . . . one of the smartest things you can do in 1931 is to make it so. Not only will you be able to carry on profitable research work—but you will also be equipped to accurately control quality on regular, daily runs.

It will pay you to write the Valley Iron Works Co., Appleton, Wisconsin, for full information on Valley Laboratory Equipment.

VALLEY

Equipment for Paper and Pulp Mills

New York Office: 350 Madison Ave.
Canadian Representatives: Pulp & Paper Mill Accessories, Ltd., Montreal, Canada

Ontario Paper Manufacturers Fairly Active

Majority of Fine Paper Grades, Including Coated Stock, In Satisfactory Request—Coarse Paper Mills Experience Better Demand Than of Late—Paper Board Plants Becoming Slightly Busier—Light Weight Papers Moving In Good Volume

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., February 23, 1931—A decidedly better feeling is developing in the wholesale paper trade in Ontario and the enquiries coming in are materializing into business in many cases. As yet, however, the volume is light and small accounts are being spread over a wide area. February is always a quiet month and if wholesalers hold their own that is all they figure on. Some lines of paper are selling very well considering the acknowledged business depression and there is quite a fair demand for fine papers of the cheaper grades. While there is no quantity selling just now many of the wholesalers are disposing of quite a fair quantity of writing, ledger and book paper, while on the other hand envelope paper is moving slowly. In nearly all cases orders are up to the manufacturing machines, however, and mill men claim that they are hard put to it at times filling orders for short runs which are none too profitable. On the whole, the distributing end of the paper business is running along fairly well and while the wholesalers could handle a good deal more business than they are getting, the situation is not disappointing and the future looks bright to them. Mill trade is fairly active, with a good call for most of the fine paper lines, including coated stock, and the coarse paper mills showing some improvement. The board mills are getting a little more active and one mill reports being a month and a half behind with their orders. On the other hand some of the board mills are running light and complaint is heard about low prices. There is a fair demand for light weight papers and there is an improved demand for greaseproof, waxing and glassine lines.

Big Expansion by Eddy Company

The new filtration plant of the E. B. Eddy Company, Ltd., Ottawa, for which the contract will be announced in a few days, is but the beginning of a vast program of improvement and enlargement which the company intends to carry out during the next few years, Victor M. Drury, the president, intimated a few days ago before more than 150 representatives of the company and prominent business men of Hull and Ottawa. The announcement has caused some speculation as to whether or not the company is preparing to enter the fine paper field. The occasion was a "shanty" supper which served a threefold purpose. It marked the conclusion of the second of a three days convention of branch managers from coast to coast; it served to celebrate the 80th birthday of the organization and was the occasion of fitting honor and tribute to John F. Taylor, who this year completes a half century association with the Eddy firm. Addressing the gathering Mr. Drury said that the filtration plant would take about three months to complete. The cost will be between $250,000 and $300,000 and would eventually mean employment for about 300 men. It was the start of a program that would mean the rearrangement of the entire premises and enlargement of the plants.

Hinde & Dauch Earnings Dropped

Hinde & Dauch Paper Company of Canada, Toronto, which manufactures fiber shipping boxes, corrugated paper products, and produces straw paper for corrugated purposes generally, had net profit of $7,522 in 1930, as compared with $191,711 in 1929, after full charges in both years for depreciation, bond interest, income tax, etc. Earnings, therefore, in 1930 were equivalent to 2½ cents a share as compared with 64 cents a share in 1929, $1.76 a share in 1928, $1.86 a share in 1927, $1.44 a share in 1926, $1.27 a share in 1925 and $1.90 a share in 1924. The stock had been paying for 21 months at the rate of $1 annually, but the quarterly dividends of 25 cents a share were passed after January 2, 1930. Working capital position was maintained in satisfactory shape by the ceasing of dividends.

Pulpwood Shippers Complain of Rates

Representatives of pulp wood producers from Fort William to Halifax in convention were unanimous in the opinion that Canadian railroads' high freight rates were throttling their business, and that, unless these rates were immediately and substantially reduced, not only would the pulp wood business be lost to the companies but the railroads themselves would suffer by reduced earnings to the extent of several million dollars. Examples of the burden pulp wood shippers are forced to carry under present rates were outlined at the meeting. Out of the gross returns received by one of the larger shippers in the Canadian Pulpwood Association for wood delivered to the United States, 65 per cent is paid to the railroads in freight. Another producer in the Cochrane District of Ontario reported the value of a carload of wood at the shipping point as about $112, but freight charges alone to the United States border amounted to $150. It was held by members that freight rates on pulp wood are altogether out of line with other low cost raw materials. Commodity values generally have dropped in the past three years, labor has had to come down and freight rates should correspondingly be reduced in the opinion of the members, if Canada is to continue to hold her export trade in this commodity.

Notes and Jottings of The Trade

J. R. Marshall, general manager of the Nashua Paper Company, Ltd., and Mrs. Marshall, have left Peterborough, Ont., on a holiday trip to Bermuda.

A. P. Jewett, of Provincial Paper, Ltd., Toronto, has returned from a business trip to the Pacific Coast. Mr. Jewett states that while business conditions throughout the prairie provinces are none too healthy yet they were not as bad as had been painted and the feeling was one of optimism that trade generally was showing signs of improvement.

The directors of the Ontario Pulp and Paper Markers' Safety Association have been called to meet in Toronto on February 20, when the proposed amendments to the Workmen's Compensation Act the first aid contest being conducted by the organization, will be up for discussion.

Five steel towers are being erected in the Port Arthur District by the Forestry Branch, each 80 feet high, and equipped, some with wireless, and others with telephone, for better protection from fires in pulp wood areas. The material is being assembled by aeroplane freight service. Towers are to be erected at Garden Lake, Pakashaan Lake, Obonga Lake, and at two other points not decided as yet. Each is equipped with a map, table and cabin. Other such towers already up in the Port Arthur zone are at Whitefish Lake, in Helen Township, at Jackfish Island, and on Susie Lake.

C. Wagenseil, New York representative of the Hollingsworth-Whitney Company, and E. S. Clark, of the Hollingsworth and Vose Company, Boston, Mass., were callers on a section of the Toronto paper trade a few days ago.

IT WILL PAY YOU TO INVESTIGATE MIDWEST'S SEVEN-FOLD SAVING

MIDWEST BEATERS · A WORLD OF DIFFERENCE · FULTON SYSTEMS

WHY do certain mills always operate at a profit regardless of economic conditions, while others cannot? The answer is that they practice a policy of aggressive effort to reduce production costs through the use of the most modern equipment.

Many such mills have adopted Midwest Hi-Speed Beaters as standard equipment, because they show a positive and definite saving in power costs, increased production and lower maintenance.

Never in the history of the paper industry has there been greater need for economical operation. We can give you FACTS about beaters that will convince beyond all doubt, that you can reduce your beating costs 30%. Write today.

MIDWEST-FULTON MACHINE CO.
DAYTON · OHIO

MID-WEST
HI-SPEED BEATERS

Pennsylvania Paper Mills Are Marking Time

Majority of Keystone State Paper Plants Are Running On From Three to Four Day Schedules, Although Book Paper Manufacturers Are More Active—Paper Board Mills Generally Confined to Part Time Operations—Dealers Only Moderately Busy

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., February 23, 1931.—There has been little activity in the Philadelphia paper market among the distributors and while the dealers are hopeful that the tide will turn as springtime needs are anticipated, present demands are confined to small lots for immediate usage. Competition continues keen, as distributors are endeavoring to clear out their old stocks and give little attention to restocking requirements, prefering to await more evidence of improvement, forecasted generally by industrial and business leaders.

Those paper dealers who have built up a following among large consumers of fine papers and specialties report that there has been a fair demand, despite the general sluggishness in the distributive branch of the industry. Mill agents and those catering to associates who have long been heavy consumers of coarser grades or the larger printing and publishing industries, state consumption has been satisfactory, although not in the volume of former normal years. January sales particularly have been well maintained. The early February demands are less but still considered fair in view of condition. Book papers appear to be the most active of the list of fine papers with all grades moving. The writing papers in the finer grades, too, hold well. Cheaper grades of writings and bonds are less active. Bulkier book papers are the leaders in present markets where mill orders are concerned.

The kraft market is steady, with orders confined to immediate needs. Mills do not appear to be offering quantities that will deteriorate values and are not urging dealers to stock in volume. There is still much of the old kraft to be wiped out before the mills will be in position to book large orders among the local wrapping paper dealers, as stocks were heavy when inventory was completed, and competition from outside paper marchants has also retarded sales of local supplies from the old year. The price cutting which came earlier in the year among paper distributors in an effort to wipe out heavy inventories, has abated and while values are still attractive to consumers they are not as disastrous to the steadying process of the market as they were a fortnight ago.

Mills in the Quaker City area are resting, along with the trade generally. Few of the manufacturers are on fulltime, most of the paper mills being on from three to four days schedule. Board mills, particularly, are confined to part time operations. Book paper manufacturers are the most active, especially those with a following among publishers. Converters of paper products, too, are less active, and bag manufacturers and container producers have adjusted forces to meet the curtailed buying. There is a hopeful sign in the future prospect and that is inquiries among manufacturers agents who are looking ahead for the springtime upward swing. These inquiries become more frequent as the month advances and it is believed that when today's inventories are reduced or wiped out in the present competitive business of distributors that mill orders will be extended if not to normal proportions, at least to broader volume than the spring buying of the past year at this season.

Trade Stabilizing Meetings to Resume

Meanwhile, in the absence of Norbert A. Considine, of the Paper House of Pennsylvania, who has been the inspiration for the stabilizing organization of the Philadelphia wrapping paper market in co-operation with a group of progressive paper merchants in that division of the local industry, who form the "Two Year Plan" Committee, to work to that end, the meeting for the current month has been postponed. Mr. Considine is spending the month in Cuba and the southern resorts in a rest vacation, following the recent death of Mrs. Considine. The meetings will be resumed in March or later this month, on his return.

Percentage Expense of Operation Under Discussion

There will be brought up at this session at the luncheon meeting in the Down Town Club, "Proper Percentages of Expense of Operation" which the committee has gathered from the wrapping paper merchants in a survey and questionnaire on the percentages of costs of conducting business. This survey covers the second four week period which the committee and the distributors conducted to obtain fundamental facts on which to stabilize the local wrapping paper market and which will be continued in the current year with a view to bringing about a more profitable and sound paper market. The percentages garnered in the survey of the trade have been summarized by a well known statistical organization assigned to conduct this phase of the work.

Predmore President of Paper Merchants, Inc.

Following the election of officers which was called to elect a successor to the late president of Paper Merchants, Inc., Edward L. McCorkendale, Winfield Predmore, former treasurer of the corporation, was made president, combining that office with the treasurer's duties. The newly elected president-treasurer, has been connected with the firm for 26 years, joining its ranks as credit manager with the parent concern of Riegel & Co., which was reorganized into Paper Merchants, Inc., a little over a year ago. John Seckel, who was formerly connected with the sales staff and succeeded Arthur B. Sherrill as vice-president, has been elected vice-president and secretary. R. Leroy McCall, who until the election was secretary and sales manager, has announced his plans to retire from the firm. The business will be continued as formerly.

W. H. Lloyd With Curtis & Bros.

William H. Lloyd, who is well known in the Philadelphia and manufacturing branches of the paper trade, has joined the staff of Curtis and Bros., fine paper manufacturers of Newark, Del., with executive offices in the Public Ledger Building, 6th and Chestnut streets. Mr. Lloyd has been in recent years sales manager and secretary of the Dill & Collins Company, fine paper manufacturers. He was associated with that concern for 24 years, joining the firm shortly after his graduation from Princeton. He will be associated with the sales division of Curtis & Bros.

Penberthy Paper Mill Division's Service to Trade

Having opened a Philadelphia office the Penberthy Paper Mill Division has been giving a special service to local paper manufacturers through establishment of the Eastern office to handle sales of mills equipment with despatch. The Eastern office is located at 1700 Walnut street, with C. F. Black as manager, and is devoted to sales of paper manufacturing equipment for paper machines and dryers. The main offices are located in Detroit.

Philadelphia Paper & Cordage Association Meets

Members of the Philadelphia Paper and Cordage Association held their usual meeting at the Adelphia Hotel on Friday, following postponement of the annual dinner dance which was to be staged on Washington's Birthday. President William Edkins

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SARATOGA SPRINGS, N. Y.

AN adequate plant; a trained personnel; out of a half-century of experience . . . foundries, machine and pattern shops . . . to rebuild and repair your equipment . . . careful attention even to the smallest involved part.

BAKER PRODUCTS

Baker Improved Kneader
Baker Improved Worm Type Knotter
Improved Monarch Diaphragm Screen—flat or inclined. "Runs like a sewing machine"
Improved Feeney Button Roll Felt Conditioner
Hydraulic Automatic Magazine Grinder
Chippers—2, 3, or 4 knife
Patent Combined Chipper and Crusher
C. Bache-Wiig Barking Drum for 4 ft. wood
Baker Stainless Steel Valves and Digester Fittings
Winder Shaft—Patent Split Type
Pulp Refiner—Single or Twin Type
Wet Machines and Deckers
Vertical and Horizontal Baker Centrifugal Pulp Screens
Horizontal Rotary Paper Machine Screens
Centrifugal Pumps in Bronze, Iron and Hard Lead
Bronze and Hard Lead Valves, Pipe and Fittings for Sulphite
Steel and Semi-steel Valves for Soda and Sulphite
Winders, Reels, Fibre Crossers, etc.

IF IT'S BAKERMADE *Eventually* It Costs Less

of the Keystone Cordage Company presided. The dinner dance was postponed owing to previous engagements of many members for that day and will be held in April or May.

H. C. Davis Campaigns on Southworth Papers

H. C. Davis, head of the paper concern bearing his name, will continue the special drive instituted the early days of the current year for the broader use and distribution of high grade rag papers, including the better lines of bonds and ledgers of the Southworth Paper Company, of Springfield, Mass. The campaign will be conducted among the allied trades in the printing industries. There are special comprehensive folders of these papers being sent to the printers. Special two-day servicing direct from the mills is a feature of the shipments in the campaign.

Hooper Paper & Twine Co., Inc., Adds Fine Papers

Within recent months the Hooper Paper and Twine Company, 105 Church street, has been developing a fine paper section which is devoted to distribution of bonds and this division of the business is to be augmented by further expansion of these grades in cover and coated paper boards. The firm is planning to stock cover papers and bristols. The bond papers include Pedrick and Marathon lines. President George K. Hooper states that sales so far this year are ahead of the same period of 1930 indicating that business is on the upward grade.

Japan Paper Co. Adds New Stationery

The Japan Paper Company, with offices in the Witherspoon Building, has added to its importations a new 1931 line of stationery of French manufacture, chiefly in boxed goods. There are many beautiful shades and fancy finishes in the importations, which will be featured for the Spring time offerings of the local manager, Warwick C. Miller.

L. A. Gipp Talks on Paper

L. A. Gipp, of Raymond & McNutt, Sheridan Building, was the principal speaker at the meeting of the Engravers Club of Philadelphia, held at the Elks Club last week, and gave a detailed account of paper production and its history throughout the ages. He illustrated present day manufacture, taking his audience through the various processes of production by movie and word picture, showing the methods of cutting and preparing timber and pulps, digesting the raw materials and their passage through paper machine, drying calenders and down to the shipping and consumption of the finished papers.

Canadian Paper Exports Decrease

Canadian exports of pulp and paper in January were valued at $11,390,293, according to the report issued by the Canadian Pulp and Paper Association. This was a decrease of $4,003,065 from the previous month.

Wood-pulp exports for the month were valued at $2,411,533 and exports of paper at $8,978,760, as compared with $2,577,546 and $12,815,812 in the month of December.

Details for the various grades of pulp and paper are as follows:

	January, 1931		January, 1930	
PULP:	Tons	$	Tons	$
Mechanical	14,545	428,227	21,820	650,696
Sulphite bleached	16,417	1,082,398	21,619	1,681,630
Sulphite unbleached	11,899	537,383	20,056	993,102
Sulphate	5,577	331,952	9,604	556,509
Screenings	1,096	18,615	2,211	41,647
All other	253	12,958	.....	.....
	49,787	2,411,533	75,310	3,923,584
PAPER:				
News print	153,362	8,641,937	199,773	11,609,926
Wrapping	1,127	110,194	1,190	128,276
Book (cwts.)	2,245	16,533	4,040	32,992
Writing (cwts.)	190	2,986	106	717
All other	.....	207,110	.....	310,847
	.....	8,978,760	.....	12,082,758

Pulpwood exports in January were 79,018 cords valued at $712,116 as compared with 120,063 cords valued at $1,135,348 in January, 1930.

New York Trade Jottings

Lawrence W. Glove, for several years manager of the F. Glove & D'Arecca Company, paper stock dealers, of 557 Water street, New York, has been admitted as a partner in the company.

* * *

S. N. Finney, who for many years was associated with the Moore & White Company, of Philadelphia, as sales representative, has recently become associated with the John Waldron Corporation, of New Brunswick, N. J.

* * *

The Robert Gair Company, of 420 Lexington avenue, New York, announces price on Standard 85 Test Liner, effective February 19, 1931, $35.00 to $37.50 per ton, adjusted for contract quantities, spot deliveries, $40.00, representing continuation of 1930 base price. Standard chip, news and manilla board prices remain unchanged.

* * *

Frank Purington, the new Eastern Division vice-president of the Salesmen's Association of the Paper Industry, was enthusiastically received at the regular weekly luncheon and meeting of the organization at George's Restaurant, New York, last Tuesday. The guest speaker was M. B. Sands, vice-president in charge of sales, of the Dictaphone Sales Corporation, who gave an interesting talk on what his company was doing and had done to meet the problems brought to the fore by the business conditions of the last eighteen months.

* * *

The gross income of the Texas Gulf Sulphur Company, New York, for 1930 was $25,815,550, the annual report discloses. That compared with gross income of $29,883,243 earned in 1929. Net income before depletion was $13,972,084, or $5.50 a share on the no par value capital stock outstanding. In 1929 the company earned a net income of $16,247,478, or $6.40 a share, on the stock. Dividends amounting to $10,160,000 were paid and the balance net income was carried to surplus. As of December 31, 1930, the company had a surplus including reserves for depletion amounting to $25,200,645, compared with $21,388,560 at the beginning of that year.

Boston Paper Market Steady

BOSTON, Mass., February 23, 1931—A moderate volume of paper has moved in this market during the last week, although the demand is hardly better than fair, taken as a whole. The improvement noted a week ago continues in a slight degree in the fine paper market. Many inquiries are being received. Individual mill orders for direct shipment are larger, but stock orders out of warehouse are small. Further developments in the way of substantial orders are expected. Wrapping paper is selling in average amounts, but some dealers report the market still somewhat slow. Some manufacturers have reduced prices on kraft. Frst runs of kraft are selling rather cheap. There is a fairly good tone in the paper market, but "competition is fierce."

The box board business is fair, with prospects favorable. Some of the box makers in Boston and vicinity are busier than they have been. Considerable activity continues in the shoe business, largely seasonal for the Easter trade, producing a greater demand for cartons and boards for their manufacture.

The general tone of the paper stock market is firmer, with an upward tendency, although there has been little, if any, price change. Business generally is better than in December. The improvement in roofing rags continues. Gunny bagging is selling actively at the same levels.

Ross Systems for Hawley Pulp & Paper Co.

A Ross heating and ventilating system for screen and riffler room has been installed in the mill of the Hawley Pulp and Paper Company, Oregon City, Ore.

Jones

A NAME THAT HAS WON A WORLD-WIDE REPUTATION THROUGH 75 YEARS DEVOTED TO PAPER-MAKING PROGRESS

PAPER-MAKING MACHINERY · E.D. JONES & SONS COMPANY · ESTABLISHED 1856 · PITTSFIELD, MASS.

"MORE EFFICIENT"

SAYS A

MILL MANAGER

THE Manager of a large Eastern mill has this to say about their recent installation of JONES BEATERS:

" . . . . we are very much pleased with the general results obtained and believe that this beating engine is more efficient on this work than any beaters we have tried, or in fact, any similar beaters that we have seen in other mills".

THE JONES REPUTATION
IS INTERNATIONAL

E. D. JONES & SONS COMPANY

PITTSFIELD . . . . MASSACHUSETTS

BUILDERS OF HIGH-GRADE MACHINERY FOR PAPER MILLS

An Old Timer's Reminiscences

By Joseph H. Wallace of Joseph H. Wallace & Co.

(Continued from last week)

Two big events in our young life happened in 1903. (1) We were introduced to Edward W. Backus of Minneapolis and all points north and west, in connection with his International Falls, Minnesota, and St. Francis, Ontario, program. (2) Robert Hewitt of New York, one of our very good friends, introduced George Hitchen, paper maker, and Alexander McIvor, mechanical engineer, of the Wall Paper Manufacturers, Ltd. of England.

Messrs. Hitchen and McIvor were on a visit to see what American paper mills resembled. Their visit to the Kalamazoo Paper Company mill which we had just designed for Fred Hodge and his associates brought about their recommendation for us to design the improvements contemplated by their own company at Darwen, England. And this developed into our building mills in England—then operating contracts to assist in bringing them into production—and an education in the art of paper making in Europe.

Greek Met Athenian

An acquaintance with Ed Backus is always an education, so we regard 1903 as our real coming-out period. We later introduced Mr. Backus to Alexander Smith, then of Peabody, Houghteling & Co., Chicago bankers, who underwrote Backus's first bond issue. Thus, Greek met Athenian! Mr. Smith has since become the leading figure in Canadian newspaper mill developments—with Abatibi, etc. The development of International Falls as an industrial city was most interesting to the writer. This job brought us into contact with J. T. Fanning, the eminent hydraulic engineer and authority—as well as his son R. B. Fanning, also well known in the same field. They had made several measurements of the flow at International Falls, and compiled valuable data on which our designs for development were based.

Juror of Awards for Paper

When the St. Louis World's Fair came on, a year later, the writer was chosen as a juror of award for paper exhibits. Among our group were George W. Knowlton of Watertown, New York; Michael Abadie of France, and A. Ohta of Japan, each of whom became clients for engineering work at later dates as well as very good friends. From Mr. Ohta we learned of the methods of Japan—from Michael Abadie we learned of the manufacture of French cigarette papers—and visited the Abadie mills in France the following year and thereafter. I can thank Mr. Abadie for many happy days in France. Acquaintance with him carries one far in that country. Harold Harmsworth, now Lord Rothermere, was another acquaintance of this period who gave me some kind attention on my visits to England.

At St. Louis, the custom of dining with various members of our group became very pleasant and so we had Japanese, German, Italian, French, Scotch, Swedish and American dinners. Such a combination in each week was far too much, as Mr. Knowlton warned me early in our visit, but I never could resist temptation and on the whole, I am rather glad I didn't do so at St. Louis. One of my engineers had a very high opinion of himself. While we were rebuilding Knowlton Bros. mill at Watertown, George W. Knowlton had occasion to ask him concerning several possibilities —and always received the same answer—viz.: "That is easy if we have time and money enough." Finally Geo. W., remarked—"Mr. ——— could you build a railroad to the moon if you had time and money enough?"

I began to study cooking at that time and have accumulated a fine library of cooking books which I am proud of. In Paris I had an introduction to the famous chef M. Marguery, inventor of "Sole a la Marguery", and other epicurean delights. I learned about salads from him. He furnished guidance in Paris, such as no hotel guide can give. Might it be called the Cook's guide? If any of you paper makers get rich and want a good all around cook, please consider yours truly as an applicant for the position. I will also navigate your yacht ably wherever you can safely go.

"Goes Foreign"

From the St. Louis Exposition "we went foreign." From acquaintances made there twenty-two trips abroad developed—and, while I was paid to go on each occasion, it seems to me that I learned more from my clients than I was able to tell them. However, if I was paid to go to Europe twenty-two times, either someone must have been suited or else I am a good bluffer or both!

On one of our crossings of the Atlantic two gentleman from Ohio were warned by the purser that the men they were playing cards with were card sharps. The Ohio men continued in the game all the way across—and took over three thousand dollars away from the sharps. On the last evening aboard, *the sharps* were essaying some tricks when one of the Ohio men called for a new pack—opening the sealed pack he counted the cards—removed joker and blank and then asked all hands at the table to cut. When all had complied he dealt a full hand (3 of a kind and a pair) to each of the six at the table, threw down his hand and dealt a straight flush to himself from the top of the pack—then laying his hand face up on the table said "Good evening, gentlemen" and left. The sharps looked astounded.

The stormiest of my forty crossings of the Atlantic was the first—the old Oceanic was three days overdue and a typical midwinter fog and snowstorm greeted her at the mouth of the Mersey where another day's delay occurred. It was Christmas Eve 1904, when we landed, and though Liverpool was cold and bleak, we were warmly welcomed by Charles Potter, managing director of Wall Paper Manufacturers, Ltd. and his friends, and entertained by them at the theatres and in their homes in typical English manner. And so we went to Darwen in Lancashire, where wooden soled shoes and paving stones make the passing of children sound like runaway horses—and here we found a paper machine that had been operating since 1870 with a twin engine of variable speed directly driving the back line, while another engine drove the pump line (constant speed). Rather overpowering for one who thought he invented this idea in 1898.

Why the Engine Had No Flywheel

I asked the manager, my friend Hitchen, why the engine had no flywheel and he told me it had one once, but that, after it went through the roof, it ran so much better that they never replaced it. That's an old story now, but it was good then and true too!

My education in paper making began right there in Darwen, Lancashire, England, and in George Hitchen I had one of the best teachers the trade has ever known. We worked together for several years thereafter, building a five machine plant on the Thames River below London—operating the plant for three years. Asked George Hitchen our English paper maker friend why a big man in his position always rode third class when travelling in English railroads. He said "Because there's no fourth class." Ask James Sickman, (one of my lieutenants at that time), about George Hitchen. Jim is now manager of Ontonagon Fibre Company at Ontonagon, Mich. He remembers the five years we made mills and paper together in dear old London—and George Hitchen, the incomparable! And Cafe Royal and Simpson's on the Strand —and the Cheshire Cheese—and the Villa Villa. And that was London—and there is only one London.

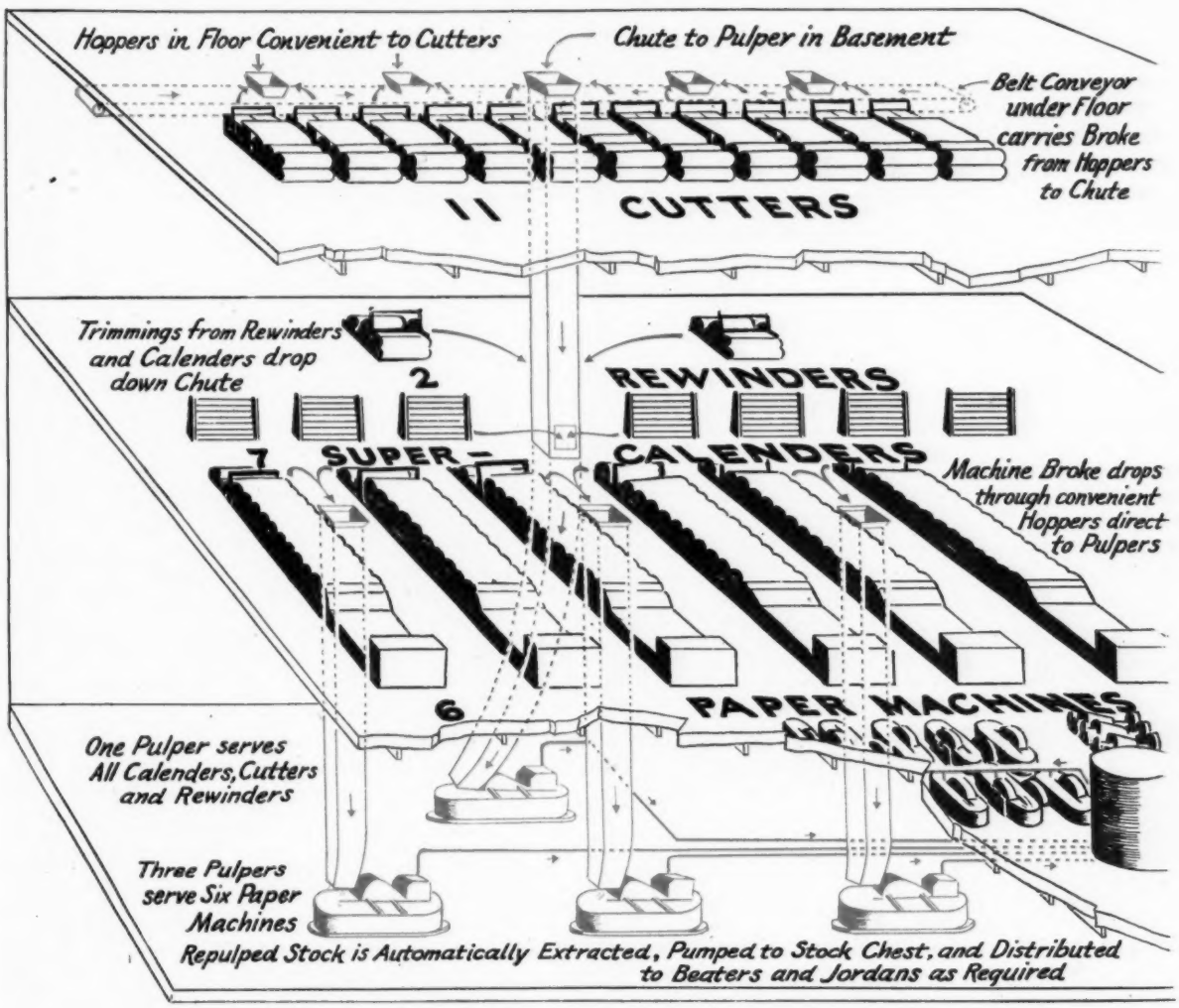
Invited to have Sunday evening meal at the home of an M.P. I made the mistake of "dressing". On my way there however discovered that I had on blue trousers with evening dinner coat and vest. On arriving my host said "I'm sorry but I forgot to say

This 200-Ton-a-Day Mill

Repulps All Broke, Trimmings and Butts

from 6 Machines, 7 Super-Calenders,
2 Rewinders and 11 Cutters with

4 NOBLE & WOOD IMPROVED PULPERS


Hoppers in Floor Convenient to Cutters
Chute to Pulper in Basement
Belt Conveyor under Floor carries Broke from Hoppers to Chute
11 CUTTERS
Trimmings from Rewinders and Calenders drop down Chute
2 REWINDERS
7 SUPER-CALENDERS
Machine Broke drops through convenient Hoppers direct to Pulpers
6 PAPER MACHINES
One Pulper serves All Calenders, Cutters and Rewinders
Three Pulpers serve Six Paper Machines
Repulped Stock is Automatically Extracted, Pumped to Stock Chest, and Distributed to Beaters and Jordans as Required

Let us show you the way to profitable utilization of wastes in YOUR Plant . . .

NOBLE & WOOD MACHINE COMPANY
Hoosick Falls New York

62

that we never dress for dinner on Sunday." I replied "never mind I'm only half dressed and that half is American."

Not Like Spokane

We had a man from Spokane, Wash., with us in London once, and after several days' roaming about we asked him how he liked London—"Oh! It's all right, but it isn't Spokane" quoth he —And we added "Amen!"—and gave him up forthwith.

On our return to New York, we were invited by Charles R. Flint, the great financier, to discuss some paper gossip at his home. Flint was the kind of man that buys the Russian fleet to sell to Chili, etc. I was rather upset by his apparent lack of attention to my answers to his questions, but one of his friends informed me afterward: "Charlie often sets his brains at work and goes away and leaves them." He can carry on a discussion of several subjects at once and knows every thing you said—and, furthermore, he never forgets anything!

Crown Prerogatives

In our first jobs abroad we found many amusing customs. The crown prerogatives included the Thames River water. The Thames Conservancy was a board or committee whose duty it was to collect tithes for the crown for any duty the Thames was called upon to perform. For example, when we built the Ingress Abbey Mill, (now Empire Mills,) we wanted to use water from the Thames for condensing. We spent several days determining what amount we should pay the crown for the privilege of heating the water of the Thames—and it needed heating too! But I must say the charges were very fair and much below the possible charges based on its value to the mill operation. When we were about to begin construction work on the big wall paper mill, we were asked by a contractor if he might furnish steel window frames and sash instead of wood. .We were amused and gave him the desired permission. When his tender for windows was examined, we found it to be actually *the lowest bid.* It was Fenestra! We became excited over its possibilities in the United States and Canada, where it was unknown at the time—bought the rights—and came back to Detroit where we showed the story to Walter Russel of Russel Wheel and Foundry Company, and thus began steel frame and sash in mills in America. Fenestra was made by Detroit Steel Products Company from that time on —and you all know that none has used any wooden sash in mill building since that time. Did you know where it came from?

(To be continued)

J. F. McCarthy Enters Paper Field

J. F. McCarthy, for the past 18 years connected with the publishing and printing industry, has entered the ranks of paper dealers in New York City.

His company will be known as J. F. McCarthy, Inc., having recently been incorporated with a capitol of $10,000. Mr. McCarthy's company will specialize in supplying paper to magazine publishers.

Servicing the printing manufacture of more than 50 publications he has found it desirable to establish a direct contact with paper sources, and he enters the field with a wide acquaintance among both publishers and printers. The offices of J. F. McCarthy, Inc., are located at 10 East 39th Street, New York City.

C. W. Parker Visits East

EMPIRE, Ore., February 21, 1931—C. W. Parker of the Sitka Spruce Pulp and Paper Company, has been spending some time in Washington while on an eastern trip. He called on Congressman Hawley and the committee which is fighting the Russian pulpwood situation and gave a strong argument as to why and how this was of vital interest to the northwest as well as elsewhere in the nation.

Mr. Parker also transacted business in connection with the pulp plant in which he is interested which has been doing quite a business with the Atlantic coast trade since the new plant started about a year ago. It is rated as a $3,000,000 corporation.

Obituary

General Ira L. Beebe

General Ira L. Beebe, a former resident of Brooklyn, N. Y., died on February 19 at his daughter's home in Jamestown, N. Y. He would have been 90 years old on February 25.

He was born in Ghent, N. Y., on February 25, 1841 and was probably the oldest member of the paper trade. His father, Roderick Beebe, was a pioneer in the paper trade.

General Beebe was the founder of Ira L. Beebe & Co. in the 70's, controlling the output of news print made at Watertown, N. Y., and supplying the newspapers in New York City.

He, with Senator Warner Miller, first introduced ground wood pulp into the manufacture of news print, and since then was one of the largest importers of sulphite pulps from Europe. He was a man of quiet tastes, well liked and admired by a host of friends.

He got his title of General when he commanded the Eleventh Brigade of the National Guard in Brooklyn. He was also a member of E Company, 7th Regiment, during the Civil War.

Besides his two daughters, Mrs. Jones and Mrs. Spring, he leaves two brothers, Charles and Clarence Beebe, who are still active in the paper trade.

Albert Wolf

PHILADELPHIA, Pa., February 23, 1931—Albert Wolf, one of the founders and members of the firm of Wolf Brothers, passed away at his home 250 South 17th street, following a long period of illness which necessitated his retirement from active participation in his many financial and business enterprises for the past year. Mr. Wolf, who was 63 years of age, was a founder with his brothers, Clarence, Edwin, and Louis Wolf, and associated with them in the organization of Wolf Brothers, one of the largest paper converting concerns in this section of the country devoted to the manufacture of envelopes, merchandise sacks, and specially patented bags and envelopes for merchandising purposes, drinking cups and allied lines catering to large consumers of these products, such as railroads and department and chain stores. He was also a member of the National Metal Edge Box Company, which is also an industry with national reputation and the first to originate this type of container. Both firms are located at 330 North 12th street and occupy almost a city square.

In addition to his association with the paper converting industries, Mr. Wolf was a prominent broker and senior member of Wolf Bros. & Co., conducting a brokerage business at 215 South Broad street. For many years he was president of Rodeph Shalom Congregation and was buried from that Temple. He was also identified with several charitable organizations. Surviving are his widow, Mrs. Minnie Loeb Wolf; a daughter Mrs. Milton Rosenau; three sons, Howard, Alfred and Walter Wolf, all linked with the paper concerns, and, his three brothers.

Swedish Pulp Mills Restrict Production

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 25, 1931—The agreements restricting the production of sulphite pulp and mechanical ground wood among the Swedish mills are apparently functioning satisfactorily, according to a report from Commercial Attache Klath, at Stockholm.

While no agreement has yet been arrived at by the sulphate mills it is understood, the report states, that they are voluntarily restricting their production by a considerable amount. According to preliminary estimates chemical pulp production during 1930 totaled 1,850,000 metric tons as against 1,872,000 metric tons in the preceding year. The 1930 output comprised 180,000 tons of bleached sulphite, 1,035,000 tons of unbleached sulphite, and 635,000 tons of sulphate pulp.

ELWELL-PARKER GIVES YOU EXTRA POWER

FOR YOUR DOLLAR

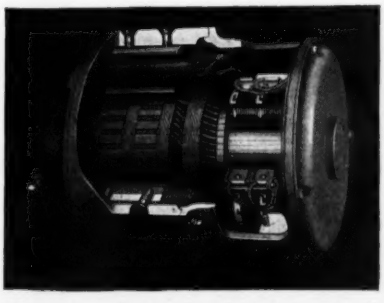
When you look beneath the steel plates—inside the housings of an Elwell-Parker Electric Truck, you see many reasons why it delivers *extra* power to the pay-load.

In the two motors, one to drive and one to lift, you notice extra heavy copper coils. Unusually large armatures. Forged field rings. The drive motor carries eight brushes. Power failure at crucial moments is impossible because there are no fuses anywhere on an Elwell-Parker. The motors are sufficiently heavy in copper to absorb all the power that can be delivered to them. On occasion, this may be five times normal demands.

Accurate machining contributes to the high efficiency of the truck. Some parts of the motors are held to within .0003 of an inch. So are the wheel bearings and differential cage bearings. Without exception, all shafts turn on ball or roller bearings. And every one is either grease packed or pressure lubricated.

Some idea of the tremendous power generated and transmitted to the wheels may be gained from the fact that drive axles must be built to withstand a torque of 150,000 lb. inches.

From these facts, it is easy to see why the Elwell-Parker carries bigger loads, climbs steeper ramps and gives you more power for the dollar you invest in electric trucks.



Motors are designed and built by Elwell-Parker solely for use in Elwell-Parker Electric Trucks. Operating characteristics can thus be completely controlled to meet the enormous power demands of electric trucking.

Write for this New Booklet. Tremendous savings are being made by handling materials on skids with Elwell-Parker Electric Trucks. The advantages, types of materials handled, and methods used are pictured and explained in a new booklet, "Handling and Shipping on Skids." It will be sent without charge or obligation to interested executives. Write The Elwell-Parker Electric Company, 4500 St. Clair Avenue, Cleveland.

ELWELL-PARKER

DESIGNERS AND BUILDERS OF ELECTRIC INDUSTRIAL TRUCKS, TRACTORS AND CRANES FOR OVER A QUARTER CENTURY

4510

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending November 30, and for the Eleven Months Ending November 30, 1930 Compared with Corresponding Month of Previous Year

IMPORTS—PAPER

	November				Eleven Months Ending November 30			
	1929		1930		1929		1930	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
PAPER AND MANUFACTURES	.....	$14,580,269	.....	$12,316,594	.....	$148,369,982	.....	$135,294,879
Printing paper—								
Standard news print ....lbs...free	442,154,897	12,972,336	391,905,238	11,139,010	4,384,244,648	130,951,990	4,171,015,050	120,631,522
Imports from:								
Finland ....lbs.	5,461,273	128,257	6,151,438	141,365	59,334,236	1,431,490	76,725,859	1,770,532
Germany ....lbs.	1,318,817	31,727	2,071,706	53,695	17,158,320	420,736	23,226,044	567,085
Norway ....lbs.	84,070	1,861	1,294,421	31,313	5,658,189	140,982	16,260,652	385,995
Sweden ....lbs.	6,331,424	163,747	9,596,348	231,928	90,776,087	2,312,237	125,753,854	3,121,087
Canada ....lbs.	405,302,825	11,987,636	345,481,967	9,911,119	3,970,220,172	119,856,513	3,650,608,391	106,909,187
Newfoundland and Labrador....lbs.	23,654,588	659,070	27,309,313	769,590	240,848,996	6,784,699	278,438,927	7,877,589
Other countries ....lbs.	1,900	38	.....	.....	248,648	5,333	1,323	47
All other, n. e. s....lbs...dut.	261,963	14,420	114,670	5,744	4,017,541	202,230	2,310,746	111,914
Greaseproof and waterproof papers....lbs...dut.	197,977	61,145	74,226	12,072	1,695,305	438,516	995,402	287,821
Kraft wrapping paper....lbs...dut.	650,630	28,440	443,873	16,443	9,102,347	391,079	7,168,521	280,908
Other wrapping paper....lbs...dut.	344,920	16,840	439,286	18,448	6,626,906	196,939	2,521,667	139,263
Writing and drawing paper, etc....lbs...dut.	230,852	76,464	188,923	44,466	2,962,133	812,528	3,161,213	783,623
Writing paper and envelope combinations ....dut.	.....	.....	.....	36,935	.....	.....	.....	246,788
Surface-coated paper ....lbs...dut.	233,969	102,547	128,591	47,056	2,296,761	980,223	1,726,254	701,666
Uncoated paper, decorated or embossed..lbs...dut.	.....	.....	6,927	2,019	.....	.....	77,909	25,960
Tissue and similar papers....lbs...dut.	450,706	253,539	.....	.....	4,622,904	2,455,004	2,056,030	1,130,184
Weighing not over 6 pounds to the ream ....lbs...dut.	.....	.....	122,867	89,222	.....	.....	626,398	390,944
Other ....lbs...dut.	.....	.....	30,353	13,631	.....	.....	239,619	93,745
Paper boards, n. e. s.—								
Pulp board, in rolls....lbs...dut.	4,841,924	103,930	3,324,882	73,034	55,341,323	1,201,057	41,781,203	947,128
Paper board, pulp board, n. e. s., and card board ....lbs...dut.	1,725,023	40,702	1,489,288	30,336	19,159,101	454,494	13,195,214	316,577
Leather board, test and wall board..lbs...dut.	457,765	21,441	64,284	8,631	1,950,539	81,574	1,530,004	98,539
Cigarette paper, cigarette books, and covers ....lbs...dut.	1,005,243	328,452	1,653,635	450,447	11,081,174	3,708,085	12,706,625	3,954,137
Hanging paper (wall paper)....lbs...dut.	274,279	64,879	126,549	27,564	2,443,253	662,027	1,859,380	559,866
Duplex decalcomania paper, not printed..lbs...free	53,861	12,470	33,949	7,697	565,475	141,093	454,038	107,482
Paper boxes ....dut.	.....	128,006	.....	102,275	.....	1,619,465	.....	1,171,393
Papier-mache and pulp manufactures, n. e. s. ....dut.	.....	52,689	.....	33,241	.....	539,297	.....	504,879
All other paper and manufactures....dut.	.....	301,969	.....	158,323	.....	3,534,381	.....	2,810,540

WOOD PULP

Mechanically ground wood pulp....tons..free	18,949	$524,108	.....	.....	211,853	$5,389,620	128,828	$3,593,166
Unbleached ....tons..free	.....	.....	18,269	$479,468	.....	.....	110,169	2,872,482
Bleached ....tons..free	.....	.....	1,174	31,207	.....	.....	4,067	108,972
Sulphite wood pulp....tons	96,180	5,410,684	95,933	4,943,916	953,253	55,706,197	904,059	51,530,553
Unbleached ....tons..free	71,547	3,562,479	68,616	3,193,591	651,186	32,801,061	608,022	30,561,118
Bleached ....tons..free	24,633	1,848,205	27,317	1,750,325	302,067	22,905,136	296,037	20,969,435
Imports from:								
Finland ....tons	14,356	615,788	12,958	587,616	102,891	4,901,688	96,026	4,707,878
Germany ....tons	4,452	317,242	3,831	238,354	57,510	4,010,660	60,173	4,026,483
Norway ....tons	3,733	217,580	2,148	135,939	53,106	3,593,414	52,788	3,360,510
Sweden ....tons	40,077	2,173,155	44,533	2,243,050	372,302	20,511,398	348,477	18,713,678
Canada ....tons	30,699	1,943,196	30,602	1,645,771	346,142	21,560,904	328,205	19,781,472
Other countries ....tons	2,863	143,723	1,861	93,186	21,302	1,128,133	18,390	940,532
Sulphate wood pulp, unbleached (kraft pulp) ....tons..free	29,936	1,583,943	38,867	1,497,877	348,723	18,719,219	316,173	14,812,151
Imports from.								
Finland ....tons	2,045	98,571	2,471	90,334	25,465	1,213,405	31,263	1,339,988
Norway ....tons	225	11,095	1,434	56,345	14,653	765,900	12,471	540,346
Sweden ....tons	17,955	890,364	30,507	1,073,658	201,108	10,192,782	207,629	9,013,606
Canada ....tons	9,510	575,125	4,154	267,182	102,073	6,297,803	60,991	3,756,972
Other countries ....tons	201	8,788	301	10,358	5,424	249,329	3,819	161,239
Sulphate wood pulp, bleached....tons..free	2,026	130,844	747	65,350	14,588	1,077,701	15,568	1,223,303
Soda pulp ....tons..free	.....	.....	83	5,050	.....	.....	1,595	107,849
Other pulp ....tons..free	588	55,510	.....	.....	5,573	477,926	2,295	170,821

CRUDE PAPER STOCK

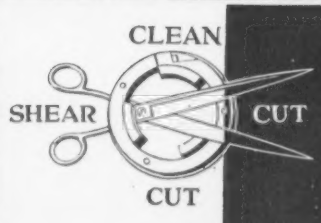
Rags for paper stock....lbs...free	35,473,325	$754,834	13,884,416	$271,602	405,252,432	$8,524,596	272,066,246	$5,387,255
All other paper stock....lbs...free	22,052,812	294,615	8,237,604	138,001	249,286,856	4,811,213	211,925,029	2,887,492

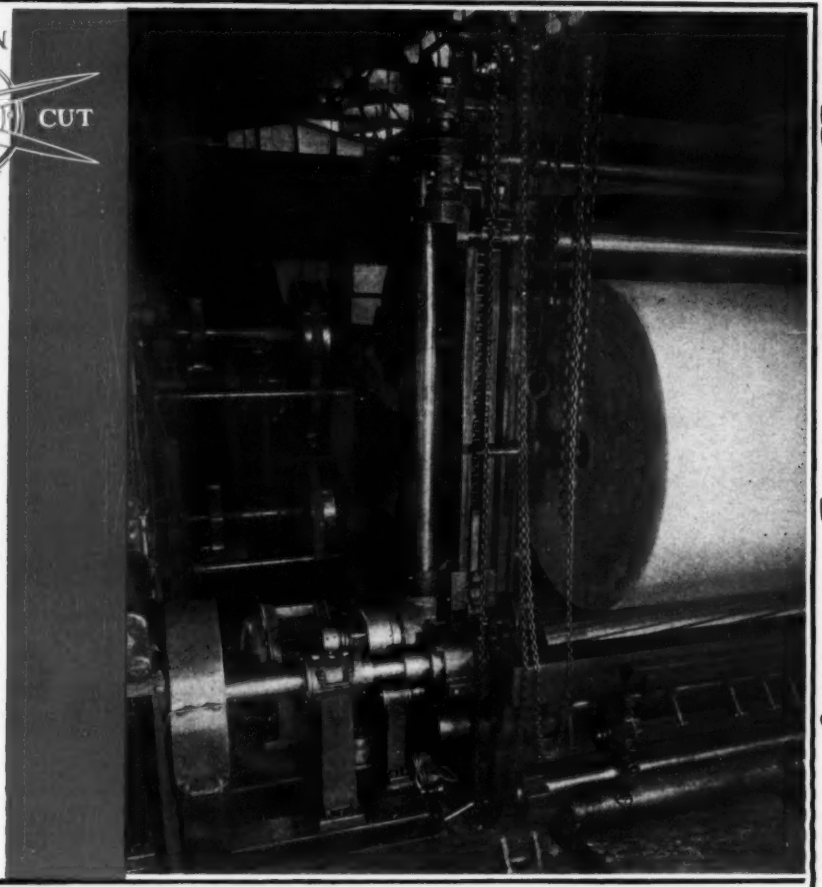
CHEMICALS AND OTHER PAPER MAKERS' MATERIALS

Colors, dyes, stains, color acids, and color bases, n. e. s....lbs...dut.	638,983	$694,249	405,495	$398,911	7,106,701	7,931,552	4,592,858	$4,866,974
Imports from:								
Belgium ....lbs.	5,158	8,019	9,514	13,638	71,471	89,230	60,336	78,107
France ....lbs.	1,543	2,958	2,821	4,517	107,762	159,510	36,617	48,272
Germany ....lbs.	346,005	348,775	187,468	176,155	4,432,549	4,770,644	2,863,091	3,047,322
Italy ....lbs.	.....	.....	1,210	1,420	11,208	9,487	16,454	18,015
Switzerland ....lbs.	269,737	317,524	190,800	186,533	2,346,490	2,749,593	1,464,425	1,523,183
United Kingdom ....lbs.	12,534	14,067	8,978	9,311	85,828	96,287	102,663	106,667
Other countries ....lbs.	4,006	2,906	4,704	7,337	51,393	56,801	49,272	45,408
Casein or lactarene ....lbs...dut.	1,800,977	226,897	415,458	23,587	25,839,599	3,105,983	17,520,946	1,869,432
China clay or kaolin....tons..dut.	11,224	121,704	15,417	155,766	233,029	2,527,998	203,730	2,122,809

(Continued on page 30)

a clean cut ~ a sure cut ~ a shear cut ~





LANGSTON
Slitters & Rewinders

TYPES to meet every mill requirement; sizes from 30 inches to 165 inches—and wider. For more than twenty years Langston Slitters and Rewinders have been producing quality rolls. Uniformly square-edged, tightly wound, *free from dust*. Better your product—lower your manufacturing costs—by installing Langston Slitters. Others are doing it. Ask for catalog and further details.

SAMUEL M. LANGSTON COMPANY
Camden, New Jersey

a shear cut ~ a clean cut ~ a sure cut ~ a shear cut ~ a clean cut ~ a sure cut ~ a shear cut ~

a clean cut ~ a sure cut ~ a shear cut ~

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(Continued from page 28)

EXPORTS—PAPER

	November 1929 Quantity	November 1929 Value	November 1930 Quantity	November 1930 Value	Eleven Months Ending November 30 1929 Quantity	Eleven Months Ending November 30 1929 Value	Eleven Months Ending November 30 1930 Quantity	Eleven Months Ending November 30 1930 Value
PAPER AND MANUFACTURES	.....	$2,873,729	.....	$2,066,217	.....	$33,948,261	.....	$28,323,255
Printing paper—								
News print paper ....lbs.	1,561,611	60,809	1,266,509	44,857	30,887,613	1,135,648	19,344,600	775,265
Exports to:								
Europe ....lbs.	153,659	9,694	55,955	2,100	835,848	50,381	1,849,585	94,138
Canada ....lbs.	48,056	3,402	3,990	140	754,980	36,706	54,197	2,146
Central America ....lbs.	178,681	6,396	65,075	2,352	1,650,072	59,873	1,319,296	48,136
Cuba ....lbs.	160,637	5,958	211,175	9,012	3,038,809	109,224	3,003,285	127,849
South America ....lbs.	510,285	18,289	223,371	7,335	10,571,013	375,461	4,168,293	141,936
China, Hong Kong, and Kwantung...lbs.	64,395	2,145	14,000	441	4,431,307	150,631	1,994,473	108,935
Philippine Islands ....lbs.	346,241	10,574	647,717	21,885	7,928,689	278,005	5,997,263	210,496
Other countries ....lbs.	99,657	4,351	45,226	1,592	1,676,895	75,385	958,208	41,629
Book paper, not coated....lbs.	2,601,085	185,703	1,388,508	95,156	33,707,867	2,384,960	30,048,008	2,021,147
Exports to:								
Europe ....lbs.	32,566	6,528	370,751	27,550	1,548,552	146,467	1,806,937	140,163
Canada ....lbs.	854,839	50,715	297,551	18,295	11,043,722	658,927	9,290,880	563,017
Mexico ....lbs.	32,756	3,852	23,911	2,635	534,146	56,051	603,721	64,951
Cuba ....lbs.	430,060	31,146	175,667	10,680	4,700,131	331,983	3,638,624	244,188
Argentina ....lbs.	176,000	12,931	77,846	4,220	1,798,242	141,938	1,339,591	96,458
Other South America....lbs.	87,366	9,841	106,007	7,880	1,215,527	104,578	1,569,827	121,295
China, Hong Kong, and Kwantung...lbs.	631,615	41,565	16,272	951	6,457,091	394,800	5,154,786	317,440
Philippine Islands ....lbs.	90,801	7,238	129,478	8,241	3,717,448	253,474	3,360,091	220,509
Australia ....lbs.	19,477	2,469	41,256	5,212	1,071,068	158,979	864,293	67,550
Other countries ....lbs.	245,605	19,418	149,769	9,492	1,621,940	137,750	2,419,258	185,576
Cover paper ....lbs.	146,748	28,763	165,209	24,490	1,875,761	325,402	2,063,387	322,184
Greaseproof and waterproof paper....lbs.	192,679	42,119	386,835	71,438	2,613,126	484,796	3,509,691	681,524
Overissue and old newspapers....lbs.	12,349,013	126,494	14,291,988	96,919	133,470,074	1,473,477	152,659,368	1,203,249
Wrapping paper ....lbs.	4,947,950	264,962	3,997,664	231,869	39,922,045	2,669,522	41,295,621	2,589,914
Surface-coated paper ....lbs.	2,512,794	205,946	341,895	44,135	14,941,423	1,388,363	7,296,830	831,591
Tissue and crepe paper....lbs.	432,343	86,489	408,314	64,462	4,387,749	977,031	4,467,932	866,734
Toilet paper ....lbs.	557,166	60,607	607,767	67,321	6,498,040	725,369	6,957,024	757,870
Paper towels and napkins....lbs.	265,560	28,691	298,612	31,264	3,327,098	403,439	3,701,171	426,890
Boxboard of paperboard and strawboard....lbs.	1,915,240	53,960	2,866,218	71,051	49,227,631	1,314,761	58,001,659	1,438,410
Bristols and bristol board....lbs.	265,274	25,914	205,808	18,840	2,665,110	262,171	2,118,361	201,147
Other paper board....lbs.	3,860,020	171,769	2,135,242	99,476	42,696,913	1,905,752	31,253,494	1,506,193
Sheathing and building paper....lbs.	1,643,842	56,049	1,009,584	31,888	21,110,850	708,304	17,673,087	596,929
Fiber insulating lath or board....sq. ft.	3,291,513	121,493	3,959,395	129,876	26,632,029	901,082	59,595,371	1,902,195
Wall board of paper or pulp....sq. ft.	5,743,203	184,011	3,415,138	111,062	64,727,449	2,111,655	28,296,869	938,897
Blotting paper ....lbs.	233,885	28,837	152,763	18,620	3,363,868	398,303	2,869,456	350,007
Filing folders, index cards, and other office forms ....lbs.	111,913	41,459	109,709	41,745	1,486,379	545,778	1,462,246	545,534
Papeteries (fancy writing paper)....lbs.	101,529	17,176	59,178	11,631	820,207	197,467	622,858	139,610
Other writing paper ....lbs.	1,785,940	186,705	1,289,618	126,540	25,876,281	2,726,290	19,719,486	1,930,232
Paper hangings (wall paper)....rolls	.....	29,418	169,431	22,451	.....	541,796	2,885,141	423,920
Paper bags ....lbs.	907,406	71,008	1,095,549	74,558	11,114,498	933,642	10,146,405	814,222
Boxes and cartons....lbs.	2,225,989	148,030	1,437,503	103,186	26,528,108	1,767,801	21,618,270	1,289,247
Envelopes ....lbs.	184,311	38,368	165,458	27,742	2,218,448	392,511	2,071,604	343,701
Vulcanized fiber sheets, strips, rods, and tubes ....lbs.	497,118	117,903	302,374	74,439	5,752,053	1,396,171	4,230,916	1,059,921
Cash-register and adding-machine paper....lbs.	584,758	50,951	141,704	23,502	5,114,739	483,004	4,089,273	389,011
Other paper and paper products....	.....	439,195	.....	307,699	.....	5,393,766	.....	3,977,711

WOOD PULP AND PAPER STOCK

Sulphite wood pulp ....tons	2,661	$149,614	2,827	$128,641	36,925	$1,990,745	28,883	$1,540,932
Soda wood pulp ....tons	221	17,159	.....	.....	1,786	145,790	1,771	138,282
Other wood pulp ....tons	193	4,465	191	1,947	5,784	380,418	10,076	256,028
Rags and other paper stock....lbs.	5,544,728	98,477	5,981,821	75,316	103,027,754	1,776,423	57,953,524	792,000

PAPER AND PULP MILL MACHINERY

Paper and pulp mill machinery....	.....	$470,255	.....	$341,243	.....	$3,734,365	.....	$3,324,155

To Reopen Mann Paper Mill

Recently representatives of a newly organized company which plans to operate the Mann paper mill on South Main street, Lambertville, called at the City Clerk's office and paid back taxes on the property for 1928, 1929 and 1930. They announced the mill will soon be placed in operation manufacturing paper specialties, and it is understood they will employ between 50 and 75 men.

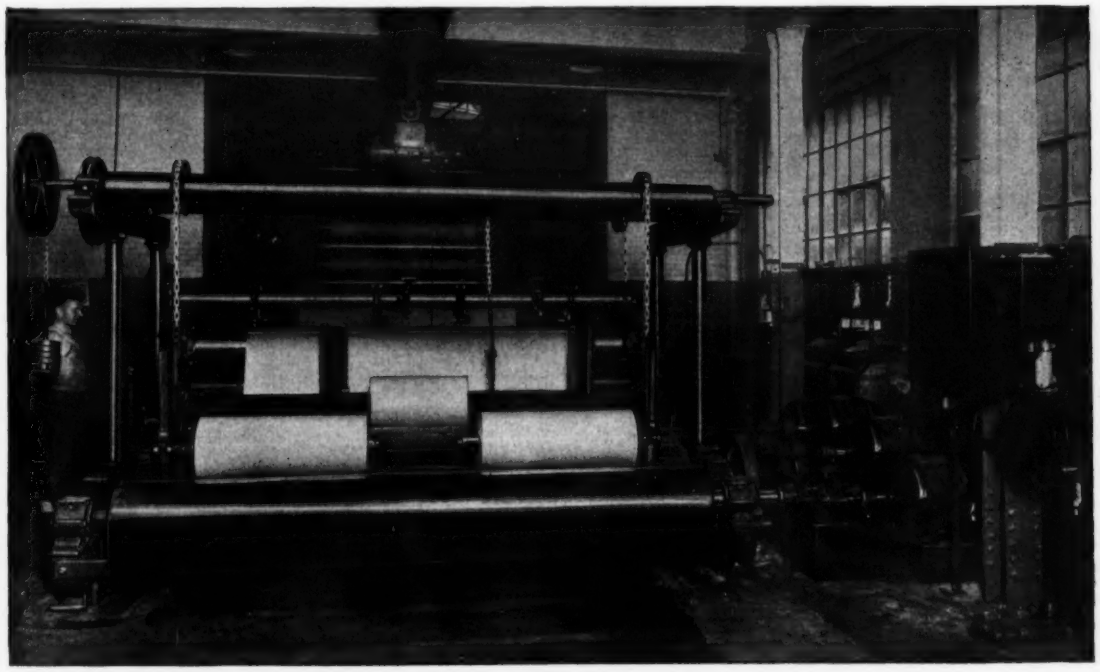
William Vandemark and Walter Cochran are the moving spirits in the new organization, which will be known as the Mann Paper and Pulp Company. This plant has been idle for several years since the Wm. Mann Company, of Philadelphia, closed it down after the demand for copying tissue ceased. Mr. Cochran is a son of the Mr. Cochran who was formerly interested in reopening the plant. At one time it was sought by the National Cellulose Company, of New York, for manufacturing absorbent paper for sanitary napkins as a supply for the Johnson & Johnson Company, of New Brunswick. But the price demanded for the plant was so exhorbitant that it was refused by the prospective purchasers.

Mills Against Pollution Clause

Pulp and paper mill interests are concerned, along with other Oregon industries, about the stream pollution clause contained in the proposed new state game commission code now before the legislature. Walter Keyes, attorney for the Oregon Pulp and Paper company, declared that unless a modification of the proposed law was made pulp and paper mills, along with other Oregon industries, would not be able to operate.

The chief phase of the code which the industries claim is most objectionable is that which would make it unlawful to introduce anything into a stream that would discolor the water. It was emphasized that the most serious stream pollution in certain sections now results from sulphite refuse from the mills.

More than fifty cities and towns are objecting to the clause of the code in question. Objection is also raised regarding the jurisdiction of this code being vested in the state game commission, and at present it looks rather dark for the sponsors of the code as it stands.



M & W electrically-driven Four-Drum Winder and Slitter in mill of Standard Paper Mfg. Co., Richmond, Va.

Customers prefer these rolls

THERE'S no "maybe" in the hardness of rolls wound by M & W Electric Drive. There's no chance of their having been wound too tightly because someone forgot to build up the counterweights as the rolls grew larger.

With the M & W Electric Drive, the *pull* of the second or front drum of each pair is constant, regardless of roll size. Once adjusted for roll width and grade of paper, it never needs changing. The result is a roll with hard centre and slightly softer exterior—precisely the roll that your customers want.

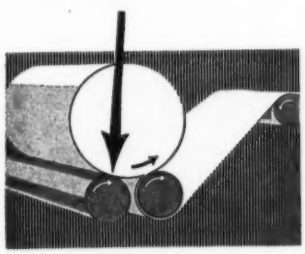
With interweaving abolished and every roll an independent unit, due to M & W Four-Drum winders, and with roll hardness automatically controlled by the M & W Electric Drive, the troubles once common with roll winding are abolished.

Let us study your present winding methods and advise what savings may be expected from using M & W Four-Drum Winders with Electric Drive.

If you haven't the Bulletin, write for a copy.

Not constant speed but constant

PULL



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15TH ST. & LEHIGH AVE. PHILADELPHIA, PA.

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A POST-DEPRESSION DECALOGUE

As we emerge from the depression—and authoritative testimony indicates that the upward climb is at last under way, said Dr. Julius Klein, Assistant Secretary of Commerce in a recent address, there is a growing realization that once more, as in every period of trial, business has learned several salutary lessons. It has been through a broadening, though trying experience, a gruelling test in a truly relentless crucible.

It might be interesting to tabulate very briefly a few impressions which come to mind as we contemplate the difficult road over which business has had to make its painful way during the past few months. The tabulation of a decalogue of the depression, comprising some of the outstanding factors, might not be inopportune for future reference.

1. Don't blame the depression for everything which has marred the tranquillity of the economic scene since 1929. The collapse of many parts of the business structure has had widespread repercussions, but there are other and in many cases deeper seated defects having nothing to do with the regretable episodes of the past sixteen months. Lack of vision, archaic methods, antiquated policies, within individual firms and trades, have all contributed toward weakening those involved so that when the depression came it was but the last straw, the final episode in a long sequence of causes, rather than the fundamental reason for current difficulty.

2. Don't compare peaks with slumps. Both are abnormalities. The more we flatten out the peaks, the better will be our control of the slumps.

3. Don't fall into the fallacy so general among European industrialists of expecting the wage earner to bear the brunt of the readjustment. Before resorting to that extremity, let industry be sure that *every* other one has been exhausted. There is plenty of slack elsewhere—careless production, inefficient management, slipshod selling. Talk of drastic slashes in American living standards and "permanent lows" in wages borders closely on economic lunacy.

4. Don't cut loose from associated activities in business. Such shortsighted "economy" is the sheerest extravagance at this particular stage of business readjustment. There never was a time in the last ten years when co-operation was more invaluable. No one shoves off in a rowboat from a liner in a mid-Atlantic storm to save passage money.

5. Don't ignore the amazing power of the new technology. No peril is quite so disastrous in business these days as a smug, self-satisfied assurance that present technique in production will be permanent. Our engineers, our chemists, our inventors, have never shown such relentless zeal as at present. They have largely been responsible for lifting the country out of every preceding crises. Those industrialists who cling to them right now will have good reason to be thankful.

6. Don't cut marketing research. Our gravest deficiency still lies in the field of defective distribution. Our major business problem these days is not what can be made, but what can be sold. If the billions wasted there could be salvaged, even in a modest proportion this year, it will be the largest single contribution to our recovery. Closely associated with this is the need of sustained, far-sighted advertising as an invaluable adjunct to more effective and economical distribution. The stimulus, not of blatant ballyhoo, but of well-founded publicity was never more necessary than now. There can be no recovery of business with lagging demand, or unwarranted timidity of consumption.

7. Don't overlook the stabilizing value of foreign markets. They can not be exploited on short notice. Many a firm has survived this recent storm because its executives had the foresight in fair weather to plant an anchor in two or three carefully selected markets far overseas.

8. Don't fall again into the perils of mass mania, the delusion that the sole purpose of business is "busy-ness." Quantity operations whether in output or distribution are by no means an invariable assurance of quantity profits. The latter are indeed elusive unless that fateful margin between income and outgo is thoroughly sustained and respected (not merely suspected). The dinosaur was a first-class example of mass production. But he and his kind have all been quite dead for several million years because too much of their "mass" was below their ears.

9. Don't overlook the perils of obsolete equipment. It is wiser to have the junk heap outside the factory than in it. Nearly half (48 per cent to be exact) the machinery in our own American factories today is over ten years old. The paralysis of advancing senility is all the more dangerous because its stealthy approach is so painless, so easy.

10. Don't be stampeded by unfounded rumors. They are the fodder on which crises flourish. In these days of abundant, accurate statistical data and superb communication facilities, there is no longer any valid excuse for mischievous gossip-peddling among otherwise sensible business executives. The mendacity of every irresponsible, dangerous rumor can be and should be instantly squelched. And it will be, as long as ours is still a business leadership of men, not mice. The time for the calamity complex has passed.

ACUTE PAPER SHORTAGE IN RUSSIA

Russia is suffering from an acute paper shortage because of the inability of the Soviet paper mills to meet the growing demand, according to a statement by a Soviet official contained in a report from Russian sources received in the Department of Commerce. This official points out that the circulation of Soviet newspapers could be increased some 30 to 40 per cent if an adequate supply of paper could be produced.

A special commission appointed to investigate this situation found that in order to supply the demand for paper in 1931, the country should produce 230,000 metric tons of news print, 179,000 metric tons of book paper, and 185,000 metric tons of writing paper. The present plant capacity of Soviet Russia, however, permits a maximum production during the current year of only 115,000 tons of news print, 78,000 tons of book paper, and 92,000 tons of writing paper. In other words, instead of supplying the country with a total of 594,000 tons of these three kinds of paper, the present mills presumably turn out only 285,000 tons, or somewhat less than one-half of the necessary quantity. So far as the present shortage of paper is concerned, the work of the industry during the special quarter, October-December, did not show any considerable improvement. Only 91 per cent of the plan for manufacturing cheap grades of book paper and news print was carried out. The accomplishments during November, it must be noted, were lower than those in the preceding month. The underproduction of these grades of paper for the two months under consideration was in excess of 5,000 tons, which includes 3,700 tons of news print. The largest Soviet paper mill, at Balakhna, has shown the worst performance. A number of other mills have turned out only 59 to 83 per cent of the assigned output. Such a situation threatens the entire printing industry of the country with an undersupply of paper.

For Canalizing the Miami River

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, February 23, 1931—A meeting of unusual interest to the paper industry was held the past week in Hamilton, at which it was shown that the industries of the Miami Valley would save millions of dollars in tonnage charges each year if the Great Miami river is canalized.

Probably the most comprehensive statement was made by H. T. Ratliff, who is traffic manager of the Champion Coated Paper Company, Hamilton, and who is chairman of the special committee of the Hamilton Chamber of Commerce on the canalization of the Great Miami.

"My business life," said Mr. Ratliff, "has been in connection with freight rates and transportation pertaining to the wood pulp and paper industry, also the raw materials incident to pulp and paper mills, so I will confine my remarks to our own industry.

"The Champion Coated Paper Company, during the year 1930, received inbound 279,596 tons of raw materials, of which 90,000 tons were coal, and shipped outbound 126,962 tons of paper.

"The market for our outbound paper was the whole United States, including some export tonnage. Our competition is with mills located in all parts of the country, including mills located on the Atlantic seaboard, Pacific Coast and the Gulf. A great many of these mills are located on deep water.

"Since the completion of the Panama Canal the shippers located in Indiana and Ohio are at a disadvantage with shippers in the Chicago territory, or points west thereof on all-rail movement to the Pacific Coast; also are at a disadvantage with shippers located in the Pittsburgh-Buffalo territory and points east thereof, for movement via Panama Canal; that is, intercoastal account the higher rates from this territory to the Atlantic seaboard. This last statement holds good also as to export.

"Since the completion of the locks of the Ohio river and service inaugurated between Cincinnati and New Orleans, the shippers at Cincinnati are now in position to meet such export, import intercoastal or coastal competition.

"To give you something concrete we have, since the inauguration of the service by the Mississippi Valley Barge Line, moved a considerable tonnage of freight, taking delivery at Cincinnati and trucking to Hamilton at a considerable saving in freight charges as against the all-rail movement to or from New Orleans.

"Another concrete example, there is a very large tonnage of wood pulp manufactured on the Pacific Coast; the all-rail to Wisconsin mill points being 60c per 100 pounds; the Hamilton rate having a differential of 5c over, say, Appleton, Wisconsin, a large paper mill point. The rate on wood pulp intercoastal to New Orleans and North Atlantic ports is 35c per 100 pounds in lots of 250 tons, which allows the mills on the Atlantic seaboard to lay their wood pulp down at a cost materially less than we lay our pulp down at Hamilton, Ohio.

"Coming closer to home, the paper mills in the Cincinnati switching district can lay Pacific Coast pulp down, when movement is via intercoastal New Orleans and the Mississippi and Ohio rivers, at a saving of about $2.00 per ton as against the all-rail rate.

"With a barge canal to Hamilton and Middletown, connecting with the Ohio river, we would be placed in the same position as Cincinnati.

"On import pulp from Scandinavian countries it is necessary to use the Atlantic port, so we are placed at a disadvantage with our competitors located on the Atlantic seaboard.

"It is now possible to lay import pulp down in Cincinnati, when imported via New Orleans, at a considerable saving as against the all-rail from North Atlantic ports to Cincinnati. Hamilton would be in the same position if we are provided with barging conditions on the Great Miami in connection with the Ohio river.

"As to the tonnage of coal moving to the mills in Hamilton we are at this time moving our coal in connection with the Ohio river to Cincinnati, thence rail, Cincinnati to Hamilton. Under barging conditions on the Miami river we would be able to barge our full requirements of coal.

"As to our potential tonnage that could be floated, I will mention the following:—Inbound freight, coal 90,000 tons; pulp, 15,000 tons; waste paper, 5,000 tons; Lumber R and W, 5,000 tons; and miscellaneous, 2,000 tons. This makes a total of 117,000 tons.

"The outbound freight of our concern is: Paper (export intercoastal and local) 10,000 tons.

"It is our sincere hope that recommendation will be made to the war department for the necessary survey."

Other paper mill men spoke, and there was a large attendance from this and other industrial centers. Mr. Ratliff's statement shows two firms, one in Middletown and one in Hamilton, alone would save millions of dollars on tonnage.

In addition the canalization of the Great Miami probably would induce Henry Ford to make Hamilton the center of a vast industrial project. He already has a site of 1200 acres there and this development was visioned several years ago. The Hamilton plant would be one of the largest in the world.

Rogers Paper Mfg. Co. Announces New Lines

The Rogers Paper Manufacturing Company of South Manchester, Conn., manufacturers of mechanically constructed insulating paper, announces a new and complete line of quality products under the trade names of: Duro, Rayco, Royalgrey and Rajahgrey—and will continue to supply its well known Armco Insulating Paper.

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Section of the
Technical Association of the Pulp and Paper Industry
Edited by Ronald G. Macdonald, Secretary

Bibliography of Wood Pulp Strength Testing*

By Donald E. Cable[1]

For the benefit of the pulp testing committee and of technical men in the paper industry, the following additional references and abstracts have been assembled in order to give the reader a complete up-to-date picture of all the research work, technical suggestions and proposed methods having to do directly or indirectly with means of testing pulp for strength.

This set of abstracts is simply a continuation of the group of sixty-three abstracts published by Moore in September, 1929. Shortly after the publication of Moore's bibliography, another bibliography similar in nature was published in the book entitled "Interim Report of The Pulp Evaluation Committee to The Technical Section of the Papermakers' Association (of Great Britain & Ireland)." Comparing these two bibliographies, one finds the following sixteen references, (Numbers 64 to 79 inclusive) in the English list but not included in Mr. Moore's set of references:

No. 64. Testing for Strength—By Sindall. Paper Mill 26, No. 17:26 (April 25, 1903).

No. 65. Determination of the Strength Properties of Halfstuffs—By G. Dalen. Mitt. kgl. Material. (1911), no. 2:12 Wochbl. Papierfabr. 43, no. 22:1894; no. 24:2220; no. 25:2304; no. 26:2408 (June 1-29, 1912); Paper 8, no. 5:22 (July 17, 1912); Papermakers' Mo. J. 50, no. 8:291 (August, 1912); C. A. 6:2525.

No. 65B. Strength Properties of Halfstuffs—By G. Dalen. Papier-Ztg., 37, no. 42:1527; no. 43:1562 (May 26, 30, 1912); Papierfabr 10, no. 22:622; no. 23:654 (May 31, June 7, 1912); Paper Mill 35, no. 28:15 (July 13, 1912); W. P. T. R. 57, no. 26:1297 (June 28, 1912); Mitt. kgl. Material, 1911, Erganzanghert II:12; J. Soc. Chem. Ind. 31:582.

No. 66. Strength of Halfstuffs—By G. Dalen. W. P. T. R. 61, no. 16:742 (April 17, 1914).

No. 67. How to Judge the Strength of Halfstuffs—By Herzberg. (Dalen's Method). Papierfabr 12, no. 14:397 (April 3, 1914); Paper Making 34:481 (1914).

No. 68. Methods of Testing the Strength of Fibres—By Beadle and Stevens. Paper 14, no. 19:21 (July 22, 1914).

No. 69. Test to Determine Strength of Fibres—By Beadle. Paper Trade J. 59, no. 17:44 (October 22, 1914).

No. 70. Determining the Strengths of Pulps; Notes on the Ball Mill Method of Testing Sulphite Pulp for Strength. Papermakers' Mo. J. 55, no. 12:385 (December, 1917).

No. 71. The Strength of Wood Pulp. Papermakers' Mo. J. 57, no. 4:113 (April 15, 1919).

No. 72. Strength Testing of Sulphite Pulp. Tech. Assoc. Papers 8:191 (June, 1925).

No. 73. Lignin in Cellulose; the Strength of Chemical Wood Pulp. Paper 38:325 (1925); Papermakers' Mo. J. 63, no. 8:302 (August 15, 1925).

No. 74. Testing the Strength of Cellulose—By Ravizza. Boll. staz. sper. ind. Carta 5, no. 6:55 (June, 1926).

No. 75. Testing Kraft Pulp for Strength. TAPPI, Special Report, I., 54 (1926).

No. 76. Evaluation of Sulphite Pulp; Relation Between the Initial Strength of Bleached Sulphite and the Strength Properties Developed in beating it—By Bentzen. Paper Trade J. 84, no. 5:59 (Feb. 3, 1927).

No. 77. Comparative Static and Dynamic Strength Tests—By Possanner. Wochbl. Papierfabr. 58, no. 24A:97; no. 27:830 (June 18, July 9, 1927).

No. 78. Evaluation of Woodpulp—By Berriman. Proc. Tech. Sect. P.M.A. 9, pt. 1:114 (1928).

No. 79. Quality Control in the Sulphite Pulp Industry—By Lampen. Proc. Tech. Sect. P.M.A. 9, pt. 2 (March, 1929); Pulp and Paper Mag. 26, 19:629; Paper Trade J. 87, 1:55.

The abstracts that follow in most cases have been taken verbatim from abstracts published in the "Chemical Abstracts" or in recent pulp & paper trade journals. Except in cases where the author's own summary is given it will be found that the initials of the abstractor are given as well as the reference to the journal in which that abstract appeared. At the end of this publication will be found an author-index of abstracts on strength testing of pulp in which the abstract numbers following the author's name refer either to the ones published in Moore's Bibliography or to the present group. Numbers in parenthesis refer to the corresponding references given in the British Bibliography. Reprints of Moore's Bibliography and of this supplement to it (Part II) may be obtained by request from the chairman of the pulp testing committee of T.A.P.P.I.

No. 80. Testing Pulps for Strength—By Possanner, Von. Papier-Fabr. 27:586-92 (1929); C.A. 24:3362.

Detailed data are presented for unbeaten tests and strength development curves obtained on the same pulp by 7 mill labs. The unbeaten pulp was furnished in the wet state, at 45 deg. Schopper freeness. Results obtained by the different testers varied from 25 deg. to 39 deg. freeness, and 4500 to 7300 m. breaking length. With the beaten pulps, breaking length-freeness curves from the 7 mills varied by 25 per cent. However, for 3 mills using methods identical in all respects the variation was only about 10 per cent, while 3 tests by the same operator showed a max. variation of but 5 per cent. The need of careful standardization of all details of the beating, sheet forming and testing procedure is clearly indicated.—R.H.D.

* A continuation of strength (of pulp) testing abstracts by Moore (Paper Trade J. 89, no. 12:62-72, Sept. 19, 1929).

[1] Member TAPPI, in charge development section, Fibre Products Dept., U. S. Rubber Co., Ft. Lisbon Rd., Cleveland, Ohio.

No. 81. The Relation Between Degree of Beating (of Pulp), Breaking Length and Air Permeability—By Possanner, Von. Papier-Fabr. 27:645-8 (1929); C.A. 24, 13:3364.

The rate of increase of tensile strength with increased degree of beating, as measured by the Schopper app. was found to be much slower than the rate of decrease of porosity of the sheets.—R.H.D.

No. 82. Physical Standards For Pulp—By Rothchild, H. A. Paper Mill 52, no. 8:118, 120 (Feb. 23, 1929); Paper Trade J. 88, no. 11:52-53 (March 14, 1929); Tech. Assoc. Papers 12:189-190 (1929); C. A. 23:3086; T. S. 90:275.

The large variety of testing methods and varied preferences of different operators make the general adoption of a definite standard method almost impossible. It is therefore suggested that pulps be evaluated by comparing with a standard sample which is subjected to the same testing procedure as the pulps which are to be evaluated.—A.P.C.

No. 83. Evaluation of Chemical Pulp and Cellulose—By Richter, E. Pacific Pulp Paper Ind. 3, no. 4:116, 118, 120, 138 (March 1929); Paper Trade J. 90:241; Tech. Chem. Papier Zellstoff Fabr. 27:1-9 (1930); Tech. Chem. Zellstoff Papier-Fabr. 26:157-65; 173-80 (1929); C. A. 24:4388, 6004.

Richter recommends for use a new method of detg. the Cu no., which gives results considerably lower than those obtained by the usual method. The Cu no. apparently has something to do with an adsorption reaction. This adsorption must also have some expression in the strength of the pulp, whence the following formula is derived: Strength X freeness/cu no. X 100 = a const. This const. designated as the "R" no., is to be taken as a measure of pulp quality. The const. holds only for a certain range of strength or freeness; after max. strength is reached it becomes very irregular.—R. H. D.

No. 84. Testing of Pulp—By Hall, Gosta. Svensk Papers—Tidn. 32:151-8 (March 15, 1929); Papierfabr 27, no. 22:341-347 (June 2, 1929); C. A. 23:3087, 5576; T. S. 91:83.

A critical review of the proposal of TAPPI to formulate strength tests on unbeaten pulps. Tests on unbleached sulphate pulps show that proper differentiation does not occur unless the pulp is beaten. Unbeaten tests were as follows:

No. Quality	Per Cent Bleach	Per Cent Lignin	Breaking Length Meters	Bursting Strength	Folds	Tearing Strength
1. Hard kraft	55.5	7.7	2320	39	79	201
2. Soft kraft	43.6	4.7	2350	41	111	208
3. Strong sulphate	28.3	3.1	2370	40	62	193
4. Easy bleach sulphate	18.8	1.7	2860	46	228	190

Maximum values after beating classified the same pulp as follows:

No.	Breaking Length	Bursting Strength	Folds	Tearing Strength
1.	9900	163	3700	50
2.	8760	138	3099	54
3.	8170	123	2055	47
4.	6430	95	873	46

A tentative standard beating and testing method has been formulated and adopted by ten Swedish mills for both sulphate and sulphite. The method is given in detail. Standard instruments specified are the Lampen Mill, Schopper-Riegler freeness tester, and the Sandberg-Bergman circular sheet machine.—C. E. P.

No. 85. The Testing of Pulps for Strength—By Jonas, K. G. and Kross, H. Wochbl. Papierfabr 60, no. 23A:45-47 (June 8, 1929); C. A. 24:3362; T. S. 90:131.

The necessity for the adoption of a standard testing procedure is stressed, and the requirements for a satisfactory method are discussed. The most important are abs. reproducibility of milling and sheet-forming procedures; this is not possible with present methods.—R. H. D.

No. 86. Making Hand Sheets of Uniform Thickness—By Williams, F. M. Paper Trade J. 89, No. 12:44 (Sept. 19, 1929); Paper Mill 52, no. 45:5 (Nov. 9, 1929); World's Paper Trade Rev. 92, no. 24:2160 (Dec. 13, 1929); C. A. 23:5576; T. S. 91:83.

A brief discussion of the importance of the construction of the supporting plate underneath the wire screen in sheet-making machines. The best form of construction, especially where uniform thickness of sheet is required, as in pulp evaluation tests, consists in making the supporting plate with rectangular openings forming a series of cross ribs, the tops of which may be dressed to nearly a sharp edge, thereby presenting practically no flat metal surface to impede the flow of water through the screen at certain points. —A. P. C.

No. 87. Bibliography of Wood Pulp Strength Testing—By Moore, W. F. United States Testing Company, Paper Trade J. 89, no. 12:62-72 (Sept. 19, 1929); C. A. 23:5580; T. S. 91:83.

A review in the form of abstracts of 63 articles published on the subject since 1915 (one reference in 1905).—A. P. C.

No. 88. Interim Report of the Pulp Evaluation Committee—By Pulp Evaluation Committee (of T. S. P. M. A. of Great Britain & Ireland). Proc. Tech. Sect. Papermakers' Assoc. 10:4-42 (1929) Also as book by itself (October, 1929), 117 pp. T. S. 91:268.

An apparatus has been designed, and is described, for the purpose of making standard sheets for testing the unbeaten strength of pulps. The apparatus consists essentially of a disintegrator, a sheet-making machine comprising a cylindrical deckle-box, 6.25 in. in diameter, with a 150-mesh wire, and constant-head drainage system, a couch roll, a sheet press, stainless steel drying plates, and a device for clamping the sheets at the edges during drying. A sample of pulp equivalent to 24 g. of bone-dry fiber is thoroughly wetted out, made to 2000 cc., and disintegrated for 75,000 revolutions at 3,000 r.p.m. Mechanical pulps are diluted to 8 liters; chemical pulps to 16 l. 800 cc. of chemical pulp stock, or 420 cc. of mechanical, are poured into the container of the sheet machine, water being run in to a height of 35 cm. above the wire. After gentle agitation to distribute the fibers, the drain-cock is opened, the sheet allowed to drain for 0.5 min. after the bulk of the water has disappeared, and the container removed. The sheet is couched off the wire by means of blotters, and is transferred to a stainless steel plate. Seven sheets are made in this way, the drying plates being alternated with blotters and the stack pressed at 50 lb. per sq. in. for 5 min. The order of the sheets is then reversed and the pressing repeated. The sheets are air-dried, being clamped at the edges to prevent shrinkage.

A M. G. finish is imparted to the sheets. After conditioning at 65 percent relative humidity and 70 deg. F., tests are made for thickness, basis weight, tensile strength, tearing strength and bursting strength. The strengths are reported as factors independent of the basis weight. In dealing with mechanical pulps, the Canadian freeness tester is recommended for checking the freeness. The method has been adopted as standard by the Papermakers' Association. The experimental work carried out by the Committee is described as a separate publication. A full bibliography is appended. —A. P. C.

No. 89. Beater Method of Evaluating Pulp—By Rothchild, H. A., Ely, A and Poppe F. Paper Trade J. 89, no. 14:72-73 (October 3, 1929); Paper Mill 52, no. 38:10, 28, 30 (Sept. 28, 1929); Pulp Paper Mag. Can. 28:567-570 (Oct. 10, 1929); C. A. 23:5577; T. S. 91:83.

A brief description of the equipment, procedure of testing and interpretation of results as carried out in the mills of the Kimberly-Clark Company.—A. P. C.

No. 90. Physical Standards for Pulp—By Cable, Donald E. Paper Mill 52, no. 40:12, 14, 44 (Oct. 5, 1929); Paper Trade J. 89, no. 17:45-46 (Oct. 24, 1929); Pulp Paper Mag. Can. 28: 677-678 (Oct. 31, 1929); T. S. 91:83.

An outline of the program of the Committee on Physical Standards for Pulp of the Technical Association of the Pulp and Paper Industry. —A.P.C.

No. 91. Strength Testing of Wood Pulp—By Bradford, Harry C. Paper Trade J. 89, no. 16:53-54 (Oct. 17, 1929); C. A. 24:957; T. S. 91:83.

A description of the method for determining the beaten strength of pulp worked out by the pulp committee of the mills in the Kalamazoo valley. The Valley Iron Works Niagara type of experimental beater is used, and was found to give approximately the

same test as given in a large beater. It gives about the same test in 60 minutes as a ball mill in 30 minutes.—A.P.C.

No. 92. Measurement of Strength and Stiffness of Fiber Boards By Means of Static Bending—By Heritage, C. C., Schafer, E. R. and Carpenter, L. A. Paper Trade J. 89, no. 17:50-52 (Oct. 24, 1929); Pulp Paper Mag. Can. 28:667-671 (Oct. 31, 1929); T. S. 91:91.

A method has been developed for the evaluation of the strength and stiffness of fiber boards. These properties are determined by a static bending test, from which the moduli of transverse strength, rupture and elasticity are obtained. The results are expressed in terms that evaluate the structural properties of the material and not merely the properties of the piece under test. The values can be regarded with little or none of the qualifying data necessary in the empirical methods applied in mills at the present time. The method is simple and inexpensive and has been shown to be sufficiently accurate for the purpose. It may be applied to boards of a wide variety and is particularly useful in determining the strength of insulating and wall boards. *A further application as in the testing of pulps for strength, where it has been found to have a particular value in the evaluation of ground wood.*—A.P.C.

No. 93. Estimating Pulp Strength—By O'Connell, James E. Paper Trade J. 89, no. 19:59 (November 7, 1929); C. A. 24:1504; T. S. 91:203.

A description of the method used at the Lake St. John Paper Co. for determining the initial strength of sulphite and ground wood in the manufacture of news print. The samples are taken at regular intervals from the pulp leaving the fine screens and placed in the sheet machine without further processing. The method is essentially the same as the tentative T.A.P.P.I. method, with the following modifications:

(1) the test sheets are not seasoned in a constant humidity atmosphere, but are first dried completely and then placed between sheets of blotting paper of known moisture content and put back in the press so that the moisture content of the sheets when tested is from 5 to 6 percent;

(2) the weight of the test sheets are 32 lbs. (24 x 36 — 500), which is the weight of the news print manufactured in this mill. The reliability of the tests is such that the proportion of sulphite to be used in the stock mixture going to the paper machines is determined from the figures obtained.—A.P.C.

No. 94. Testing Pulps for Strength—By Rieth, K. Papierfabr. 27, no. 45:693-695 (Nov. 10, 1929); C. A. 24:3362; T. S. 90:131.

The effect of moisture content on strength, and of sieve character on the freeness detn., are discussed as sources of error.—R.H.D.

No. 95. Wood Pulp Testing—By Gemmell, G. H. World's Paper Trade Rev. 92:1902-6; Paper Maker & Brit. Paper Trade J. 78: 615-6, 620 (1929); Paper Mill 53, no. 1:14, 24 (1930); C. A. 24: 1503; T. S. 91:203.

A discussion of the importance of developing and adopting an internationally acceptable procedure for the testing of wood pulp. —A.P.C.

No. 96. Determination of the Strength of Sulphate Pulp—By Kienzl and Nagl. Papierfabr 28, no. 4:49-55 (Jan. 26, 1930); C. A. 24:3362; T. S. 91:155.

From the results of research, the Lampen mill used for the determination of the strength of sulphate pulp has given excellent results. Moist pulp attains a higher Schopper Riegler, ten degrees in the first hour, quicked than dry pulp. Upon further treatment the pulps have the same value. Strong inorganic acids have a decided influence on the degree of beating. Beating in an alkaline solution has no noticeable effect. —J.F.O.

Determination of the Strength of Soda Pulp

Data are presented showing the effect of consistence, vol. of charge and speed of rotation, on the rate of increase of slowness of alk. pulps on processing in the Lampen Mill. The conditions of 800 c. c. of charge at 2.5% consistence, 250 r.p.m. for the first 30 min. of treatment and 300 r.p.m. thereafter, are recommended. It was found that the slowness developed more slowly at first, but attained the same final value, with dried as with moist pulp. The efficiency of milling, as measured by the rate of slowness development, was decreased by addn. of H_2SO_4, and increased slightly by $(COOH)_2$. Addn. of NaOH gave very irregular results. When the mill was started at 10° temp. the slowness after 1 hr. was 49, whereas when started at 50° it was but 35 after the same time. Conclusion: The Lampen mill is more reproducible in operation, and therefore preferable for testing to the miniature beater. Since the same slowness is not always developed in the same time with the same pulp, tests should be made at const. slowness rather than at a standard time. The variations in duplicate runs are ascribed to variations in the disintegration of the pulp before milling.—R. H. D.

No. 97. Strength Testing of Wood Pulp—By Rothchild, H. A., Lundbeck, Ivar and Cable, D. E. Paper Trade J. 90, no. 8:264-265 (Feb. 20,1930); T. S. 91:203.

A detailed description of the procedure of the proposed official method of the Technical Association of the Pulp and Paper Industry, for determining the beaten strength of paper by means of a laboratory beater. It deals only with the furnishing and operation of the beater, since sampling, making of hand sheets and testing of the sheets are the same as for the determination of the initial (unbeaten) strength or of the beaten strength by the pabble or ball mill test.—A.P.C.

No. 98. Strength Testing Pulp—By Humm, W. Papier-Fabr. 28, no. 8:116-119 (Feb. 23, 1930); C. A. 24:3366; T. S. 92:3.

By means of the stamp or the punch method of strength determinations, conclusions regarding the individual fibers are drawn. Apparatus and methods are described and the results are compared with the tearing strength.—J.F.O.

Strength Testing of Paper Half-Stuff

The "stamping strength test" (Stanzfestigkeitsbestimmung) is believed to give an indication of the strength of the single fibers independent of sheet structure. The tester is attached to the usual tensile tester. It consists of a die with a circular hole against which a sheet of paper is clamped. A plunger is then forced through the die until the paper fails in shear. The strength by this test becomes regularly less as the fibers are beaten or chem. processed, apparently approaching a min. limit.—R.H.D.

No. 99. The Influence of Variations in the Experimental Conditions upon the results of Pulp Strength Tests—By Grund, Eberhard. Papier-Fabr. 28:329-37 (1930); C. A. 24:4389.

The breaking length and stretch of test sheets made from 5 beaten pulps under various conditions show variations clearly indicating the necessity of close control of the sheet-forming operations in pulp testing. The sheets were in all cases seasoned and tested at 65% relative humidity. The data, presented in 41 tables and 3 curve figures, show that:

(1) The strength varies with basis wt. of the sheet, being at a max. at a wt. of 80 g. per sq. m. The strength increases 20 to 25% between 40 and 80 g. per sq. m. and then decreases less rapidly. Stretch and moisture content of the sheets increase regularly with basis wt.

(2) Strength is decreased by allowing the stock to stand and settle in the sheet machine between diln. and formation of the sheet, a 10% decrease resulting from 30 sec. settling.

(3) Strength is decreased by increasing the consistence above a water pulp ratio of 750 to 1, a 3-fold increase causing a loss of 5% in strength.

(4) Strength varies with wet pressure, increasing at first rapidly and then more slowly to a max. in sheets pressed at 120 to 140 kg. per sq. cm.

(5) Strength is increased 7% by increasing the time of pressing from ½ to 2 min. Further increase of time is without effect.

(6) Strength decreases with increasing temp. of drying between 20° and 150°; the decrease is nearly linear and amounts to some

15% over this range. Sheets dried at a higher temp. have a lower equil. moisture content.

(7) Strength decreases with increasing length of test strip, being in the approx. ratio 110:100:95 for strip lengths of 10, 50 and 100 m.m., resp.—R.H.D.

No. 100. Preparation of Fiber Test Sheets—By Shaw, Merle B., Bicking, George W. and Snyder, Leo W. Paper Trade J. 90, no. 16:60-66 (April 17, 1930); Tech. Assoc. Papers, Series 13, no. 1:254-260 (May 1930); T. S. 91:155.

A laboratory method for making small sheets of fibers in studying the paper making quality of pulp has been developed and a suction sheet machine has been designed. The apparatus and its operation are described in detail. The method relates to the forming of the sheet of fibers on the screen and the subsequent operations of couching, pressing and drying. The finished sheet is adequate to supply specimens for each kind of test ordinarily made to evaluate the quality of paper. With the equipment and procedure described, sheets uniform in quality (formation, weight, etc.) can be made by an operator of average skill. Measurements of the physical properties showed that the different sheets made from a given sample of stock are in good agreement and that the sheets can be duplicated as desired. The personal equation is reduced to a minimum and truly comparable results can be obtained by different operators.—A.P.C.

No. 101. Report on Physical Standards for Pulp—By Cable, Donald E. Paper Trade J. 90, no. 24:67-68 (June 12, 1930).

During the past few months our Committee has made the following important decisions (by at least a two-thirds vote in the affirmative) concerning details of how to make up standard test sheets:

A. We prefer to leave the size of sheet area open to some latitude and recommend as Mr. Genberg's Committee did three years ago (Technical Association Papers X, p. 117, June, 1927) that test sheets may be made of any size within the limits of 36 square inches and 81 square inches in area.

B. A standard basis weight of approximately 120 pounds (air dry ream of 25 x 40-500) should be adopted for sheets made in the "unbeated" or "initial strength" test.

C. In the making of the pebble mill and beater tests where the development of maximum bursting strength is attempted the standard basis weight of test sheets shall be within the range of 50 pounds to 60 pounds (air dry per ream of 25 x 40-500).

No. 102. More about the Beater Value of Pulps—By Gephart, O. P. Paper Trade J. 91, no. 1:52-3 (July 3, 1930); Tech. Assoc. Papers Series 13, no. 1:145-6 (May 1930); cf. C. A. 23:5577; C. A. 24, no. 21:5491.

Taking the Mullen and tear tests as two of the most important tests from the standpoint of the strength of pulp, G. discusses the importance of detg. both the initial and the beaten strengths of pulp to evaluate properly its strength characteristics (more particularly its "beater value," as defined in an earlier article by the author), showing that pulps, which might be considered equal if judged by the initial strength only, may be shown by the beating strength test, and found in practice, to be quite different in strength characteristics.—A.P.C.

No. 103. Ground Wood Pulp Evaluation—By Schafer, E. R. and Carpenter, L. A. Paper Trade J. 91, no. 3:61-65 (July 17, 1930); T. S. 92:3.

By Means of Static Bending Screen Analysis and Rate of Flow Tests

The correlation of the static bending test, the fractionation of pulps by means of screens, and the rate of flow test, three new methods of pulp testing at the Forest Products Laboratory, and their relation of fundamental physical properties of the pulp are discussed.

The necessity of forming pulp boards, for testing in static bending, under controlled conditions is emphasized and a suitable method described. Data are given which show that pressure on the wet cake and during the drying of the pressed board has an important influence on the strength and stiffness of the resulting board.

The fractions obtained by screening pulp on a series of differently meshed screens are found to possess different physical and chemical properties. The value of the screen analysis for obtaining information regarding the length of fibers of which a pulp is composed is pointed out.

The rate of the flow of water through pulp under the conditions described has been found to diminish at a definite rate, which may be expressed by a mathematical equation. One of the constants in this equation appears to be related to the strength of the pulp at the elastic limit and at rupture. Certain considerations are presented which indicate that this constant is a measure of the hydration of the pulp. The relation of the constant to the stresses in the paper or board at the elastic limit allows the strength of the material, attributable to hydration, to be expressed in terms independent of piece dimensions or of other variables.

No. 104. The Evaluation of European Pulps. (Preliminary Report)—By Moore, Warren F. and Willets, Wm. R., Paper Trade J. 91, no. 11:78-81 (Sept. 11, 1930); C. A. 24:6009.

Strength data are given and discussed for 21 well-known brands of European pulps comprising 1 bleached sulfite, 9 unbleached sulfite and 11 kraft. In a few cases chem. analyses of the sulfite pulps are given. The methods used are briefly described. Oven drying of the pulps before beating lowered their rates of hydration and bursting strengths, and increased the tearing values. The actual results obtained by beating together a fast- and a slow-hydrating pulp checked the theoretical values fairly closely, the difference between the actual and theoretical tearing strengths, especially, being very small. The possibility of blending 2 pulps of known phys. behaviors to obtain a stock having definite strength characteristics is clearly indicated. On testing 2 brands of the same pulp, one received in 1928 and the other in 1930, the 1930 pulp was found to have a higher Mullen strength and considerably lower tearing values than the 1928 sample. In general, if 2 pulps are of a similar type, the faster-hydrating will have a higher and steeper Mullen curve and a lower tearing curve than the slower-hydrating pulp. The kraft pulps hydrated more slowly than the sulfite pulps; their tearing and Mullen strengths were considerably higher than those of the sulfite pulps. The 1.5-lb. controlled-bedplate beater was found relatively unsatisfactory for use under the present procedure where anything like complete testing data were desired, because after 6 or 7 samples have been removed circulation ceases because of the greatly lessened vol. of stock in the beater and the increased hydration of the pulp.—A.P.C.

No. 105. The British Standard Methods of Sheet Making and Testing—By Clark, James d'A. Paper Trade J. 91, no. 12:61-64 (Sept. 18, 1930).

An outline is given of the events leading to the adoption of the British standard methods of test sheet making and obtaining the initial strength of pulp. The outstanding differences between these methods and those tentatively suggested by TAPPI and the Canadian Committees are discussed, including disintegration, dilution, pressing, testing of the sheets and their substance. The use of the sheet making equipment for obtaining a precise and more practical freeness reading than apparatus in common use is also commented upon. Requirements of a precision beating apparatus are suggested and also a standard set of tests for a pulp sufficiently complete to indicate its suitability for any class of paper.

No. 106. Testing Pulp for Fine Paper—By Edge, S. R. H. The Paper Mill 8, no. 52:16, 17, 20 & 21 (Dec. 27, 1930).

(Abstract of paper presented before the London Division of The Technical Section of The British Paper Makers Association, November 14, at London).

Comments of particular interest made by Mr. Edge in his paper are as follows:

A Beating Test

"We had not done these tests on more than half a dozen pulps

before we were convinced that the initial strength test alone was insufficient for our purpose."

"We realized therefore, that however satisfactory the initial strength test might be to news print manufacturers, by itself it was useless for our purpose. Had such tests been circulated to our managers by themselves the whole scheme of strength testing would have been quickly discredited."

"In developing the test we now employ using our Lampen mill we kept in mind the fact that it was a routine test we desired to develop, a test which should be sparing of material and time and which should give as much information in a condensed form as possible. This led us to favor a single beaten test rather than a series taken from different times of beating."

"Our detailed procedure is to make one set of sheets after disintegration alone in accordance with the instructions published by the Pulp Evaluation Committee and to make a second set after disintegration and a standard beating, recording the wetness in each case. From the first set sheets are kept for color estimation, degree of fading in ultra violet light and cleanliness."

Standard Beating Test

"The standard beating test is as follows: 12.5 grams of the pulp is weighed out, torn up, and soaked over night in 2 liters of water."

"The drained pulp is transferred to the mill together with water to make up the total volume of 500 ccs. The mill is run for 13,500 revolutions, which takes up about ¾ hour. The pulp is washed out of the mill, made up to 6.25 litres, 1 litre used for the Schopped Riegler wetness determination and the rest made into a set of standard sheets."

Results

"For over two years now these strength tests have been in regular routine operation on deliveries of wood pulp and on every sample we have been able to obtain."

A General Strength Factor

"As tests accumulated it soon became obvious that the large number of different factors was confusing."

"There are obvious advantages in working out a method of combining the four factors into a general strength factor, because then the same relative value will be given to each of the factors in every case and in addition the one figure obtained can be remembered and used for comparisons between pulps."

Wide Strength Range

"Useful though these tests are, we fully realize their inadequacy to define the pulp completely. From the research point of view the pulp should be beaten to extreme wetness in several different ways, sheets being made at intervals and graphs drawn of the relation of each particular factor to wetness and to time of beating. We hope some time to be able to experiment with the type of beater having a fixed roll and a movable bedplate capable of being pressed against the roll with a known pressure controlled by weights."

Combined *Index to Authors* for British and American Bibliographies on Wood Pulp Strength Testing

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TAPPI Notes

Chris Anker is now with the Papindustriens Forskningsinstitutt, Skoyen, Oslo, Norway, having been with Papindustriens Forskingskomite in Oslo.

H. E. Brakewood, who has been with the Ohio Boxboard Company for the past five years is now with the Scott Paper Company at Chester, Pa.

W. A. Chilson has accepted an appointment at the Forest Products Laboratory after having been with the Marathon Paper Mills for the past year or so.

H. E. Patterson, who has been with the Chicago Mill and Lumber Company Weatherboard Plant at Greenville, Miss., is now in the employ of the United States Gypsum Company, due to the fact that Weatherboard Plant has been taken over by this company.

C. M. Rhodes, formerly chemist of the Flintkote Company at Rutherford, N. J. has gone with the Rap-In-Wax Company at St. Paul, Minn.

The Norton Company, a contributing member of TAPPI has officially appointed Bernard Bornstein as the company's representative in the Association.

L. W. Heard who has been chief chemist of the Ontonagon Fibre Company of Ontonagon, Michigan, is now superintendent.

G. H. Spencer, sales manager of the Minton Vacuum Drier Corporation is now a vice-president in that concern.

The Robert Saenger Company, Ltd., of Warsaw, Poland, a corporate member of TAPPI has merged with Steinhagen, Wehr & Co. and henceforth will be known as Steinhagen & Saenger.

Daniel M. Wadsworth has resigned as chief chemist of the operating laboratory of the Bogalusa Papar Company. He may be reached at Louisiana Ave., Bogalusa, La.

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Committee on Abstracts and Bibliography, Contribution No. 53

By Clarence J. West, Chairman

(Continued from last Week)

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(To Be Continued)

For the Five Day Week

HOLYOKE, Mass., February 24, 1931—Labor men in this city are taking the initial steps to secure a five-day week in the papermaking industry. International Vice-President John W. Bailey of the local Eagle Lodge Papermakers left yesterday to attend the executive committee meeting previous to the annual convention of the International Brotherhood of Papermakers to be held at Montreal May 5. Eagle Lodge had previously adopted a resolution for the five-day week.

At the meeting of the Holyoke Central Labor Union Sunday afternoon delegates from Eagle Lodge to the union notified the central body of their intention of calling a mass meeting soon of both union and non-union men at which the adoption of the five-day week presumably without loss of pay will be discussed and favored.

It is not quite clear how far the unions will go in this matter, but it is understood that the attempt to seek a five-day week will be pressed in all quarters, Holyoke being but one of the localities. Paper manufacturers are not believed to be likely to oppose this measure if this be done; but is will be opposed if Holyoke is to be made the goat and alone of other communities engaged in papermaking be asked to adopt such a measure.

Full Lehigh Catalog

A new catalog No. 903, describing the construction and application of the Fuller-Kinyon System to the transportation and distribution of pulverized coal, has just been issued by the Fuller Lehigh Company, 65 Liberty street, New York, N. Y. Besides including a general description and a diagrammatic sketch of the System, the catalog contains a number of illustrations of the equipment and views of installations.

Copies of the catalog ars available upon request to the company.

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The Outlook for General Business and the Pulp and Paper Industries in 1931*

By Dr. E. O. Merchant[1]

Anyone who undertakes a forecast for 1931, after the disastrous outcome of last year's forecast, does so with much fear and trepidation. He is like the child who has had his fingers burned.

At the beginning of 1930 it was the almost universal belief of the leading economists of the country that the business recession which had begun in July 1929 would not go far enough to penetrate the depression area. This belief was based on the knowledge that money rates had eased very rapidly, immediately following the stock market debacle in October and November 1929, and that neither commodity prices nor inventories were inflated as they were in 1920 or in most previous booms.

Starting with such a premise, it was logical to predict that the recession would not run much over 14 months and would be followed by a rapid recovery during the fall months of 1930. Developments during the first half-year bore out the logic of this reasoning, but in the second half-year, as you know, instead of a recovery getting under way, a secondary and more severe slump occurred, which carried business even further into the depression area than it was carried in 1921. The causes of this secondary slump are still little understood. What we do know is that they were world-wide and powerful enough to overwhelm the recuperative tendencies that were in evidence in this country during the first half of 1930.

If we were to attempt to list the many causes of the 1929-1930 depression, we should probably be justified in putting as fundamental the accumulation of gold in this country in the decade following the world war, which led to an over-expansion of credit and nation-wide speculation first in real estate and then in securities. This speculative mania which reached a climax in 1929 forced up money rates, attracted funds to Wall Street from all over the world and put a stop to any further loans by us to foreign countries. In fact, it drained the European and other countries of their life blood, without which economic recovery could not continue. Coupled with this was the drastic decline in the price of silver, which seriously curtailed the buying power of half the population of the world. These two factors put too great pressure upon the commodity markets and prices of the leading raw materials collapsed. In addition to these two fundamental causes, there were many supplementary and contributing causes, such as, the drought last summer, political upsets and revolutions in various parts of the world, the long-drawn out tariff fight in this country, etc. This is the particular explanation of the causes of the slump that appeals to me as most logical. But anyone has a different explanation.

At the present time we find ourselves at the bottom of a long business decline lasting already 20 months, with little, if any, statistical evidence as yet that the turn has come. The final stages of this disastrous slump have been marked with serious unemployment, bank failures and a heavy shrinkage in earnings and income of individuals and corporations, which seriously curtails the buying power of the public. The desire to buy may be as keen as ever, but the income with which to buy has been greatly reduced.

The Business Outlook for 1931

In attempting a forecast of business trends for 1931, we start with two serious handicaps. First, we are not yet sure that a definite turn has come and we do not know just when it will come, although the indications are multiplying that it will be soon, and second, as stated above, we know altogether too little, as yet, about the world-wide influences which forced us into this unexpected and difficult situation, or when they will moderate sufficiently to make recovery possible. But we may be confident of one thing and that is that conditions will improve in this country, with its tremendous recuperative powers, just as soon as the outside pressure is removed sufficiently to permit these forces to assert themselves.

Assuming that a definite recovery does begin within the next month or two, the next question naturally is how rapid will the recovery be. On this point the indications are not very promising. It looks as if the recovery would be slow and halting for a considerable period of time before it can develop momentum to become rapid. Most economists are of the opinion that business will not get back to normal until sometime in 1932. It is quite possible, however, that under the influence of the present distressing conditions, these forecasts are too bearish and give too little weight to the tremendous recuperative powers of this country, once they begin to operate.

The outlook for general business depends to such a large extent upon the outlook for the several major industries, such as, automobile, iron and steel, new building etc., that conditions in these industries must be carefully examined before any definite conclusion regarding the general recovery of business can be arrived at.

The Outlook for Automobile Industry

Forecasts of the production of automobiles for the first half of 1931 range from 1,800,000 cars to 2,200,000 and for the whole year from about 3,800,000 to 4,500,000 cars as compared with 4,600,000 in 1928, 5,600,000 in 1929 and 3,500,000 in 1930. The more

* Address delivered at New York, Feb. 18, 1931, at meeting of Cost Department, American Paper and Pulp Association.

[1] Statistician, George H. Mead Co.

optimistic estimate for the first half-year is about equal to the output for the corresponding period of 1928 and 1930. If this output is attained it will exert a strong upward pull on business generally during the next few months. But whether it can be attained is a question. The January and February production estimates are not very encouraging. On the one side we have the known fact that the buying power of a considerable part of the public has been crippled, which will force many a potential buyer to make his old car do for another year, and on the other side is the strong appeal made by the new models with their beautiful lines, varied colors and low prices. Never before have such automobile values been offered the public. It is difficult to predict what will be the outcome of these contending forces. We can only hope for the best, remembering that the automobile industry, more than any other, holds the key to the general business outlook.

Building Industry

Next to the automobile industry, the building industry is probably the most important in its influence upon general business. Contracts awarded in 37 states, according to the F. W. Dodge Corporation, totalled about 4½ billions in 1930 as compared with 5¾ billions in 1929. Most forecasts for 1931 do not place the total for the new year any higher than in 1930. Public works will probably continue heavy, due to efforts made by cities, States and Federal Government to furnish employment, and residential building may expand somewhat because of cheap money and lower cost of building materials. It must be admitted that the outlook for new building in 1931 is not as promising as it was in 1921, when the back-log of needed construction accumulated during the war furnished a strong impetus to the revival of business. At the present time there is no real shortage of housing, office space, factory buildings or any other type of construction, except possibly schools, hospitals, prisons and similar public works.

Iron and Steel Industry

The iron and steel industry furnishes materials to the automobile, building, oil, and in fact, to almost all other industries and also to the railroads, and is, therefore a good barometer of general business conditions. Production of steel ingots in 1930 dropped to 39 million tons as compared with 54 million tons in 1929 and 50 million tons in 1928. The rate of operation for 1930 averaged about 63 per cent of capacity as compared with 88 per cent in 1929 and 83 per cent in 1928. In the second half of 1930 the rate of operation declined sharply until in December it was down to 38 per cent of capacity. Since the first of the year there has been some improvement. January probably averaged around 45 per cent as compared with 70 per cent a year ago and the rate at the present time is close to 50 per cent. Production for the first half of 1931 will almost certainly fall below that for the first half of 1930, which is a good indication of what business generally is likely to do. For the second half-year the outlook is more favorable.

Other Factors

It is not necessary to describe in detail the many other factors that will influence the 1931 outlook for business. Money rates are extremely low, the New York rediscount rate has been cut to 2 per cent, the lowest rate in the history of the Federal Reserve System. Call money is quoted at 1½ per cent, time money is also down to 1½ per cent, the lowest rate in many years. Commercial paper rates are down to 2½ per cent. Cheap money will act as a stimulant both to speculation and business recovery, once the other factors become more favorable.

In spite of the many bank failures witnessed during the last quarter of 1930, the banking situation is essentially sound and the banks are abundantly able to finance an expansion of business once it gets under way. In most of the twelve Federal Reserve Districts the ratio of deposits to loans and discounts stands above 80 per cent against a legal minimum of 40 per cent.

Wholesale commodity prices, as shown by the leading indexes, declined almost steadily during 1930. There were occasional pauses in the downward trend when it seemed as if prices were going to stabilize. But these periods did not last long. In the second half-year the rapid decline in the price of various basic commodities such as, silver, copper, sugar, rubber, coffee, wheat and cotton, probably was more responsible than any other immediate factor in forcing business activity in this country deep into the depression area. Wholesale commodity prices still show weakness, although since the first of the year the decline of the indexes has been moderate. No real advance in the commodity prices can be expected until business expansion gets under way and it now seems certain that a lower price level will prevail during the next decade than during the decade from 1920 to 1930.

Business Recovery Coming

Taking all the factors into consideration that we know about at the present time, we may conclude that the business depression has reached bottom or close to it and that the turn upward, if it has not already come, will make its appearance within the next few months. Of course, the statistical evidence of a change in trend will not be available until some time after the turn has actually occurred.

While conclusive evidence is still lacking that the turn upward has already come or will shortly be seen, yet it must be admitted that a decided improvement has occurred since the middle of December in many lines. Two months ago the New York banking situation was near a collapse and bank failures all over the country were being reported daily, the stock market was experiencing what might be called a secondary panic, as frightened holders voluntarily or under compulsion threw their holdings into the market, the bond market was also breaking badly as the banks endeavored to increase their cash reserves not knowing where a run would start next, and business sentiment was extremely pessimistic. Since those gloomy days we can note many changes for the better. The New York Federal Reserve Bank dropped its rediscount rate to 2 per cent and bond prices firmed, the Eastern railroads agreed to a four party merger and railroad stock prices advanced, the banking situation passed through the crisis without a serious collapse and business sentiment improved, followed by a rally in stock prices, which during the past week has given evidence of reviving public interest. Some expansion of activity has occurred in several basic lines such as the automobile and iron and steel industries. The unfilled orders of the U. S. Steel Corporation have increased for four successive months. It now looks as if some of the indicators for January would show a greater increase over December than normally occurs. If enough of these indicators show pluses, the composite indexes of business activity will turn up. With one exception, no major depression since the Civil War has lasted more than 18 to 20 months from peak to trough and that one exception in the seventies was due to the resumption of specie payments. December was the 18th month of the present depression and February is the 20th.

It now seems certain that the first months of recovery will be slow and halting, since buying power generally has been badly crippled. For this reason, the business statistics for the first half-year in most cases will show losses as compared with the first half of 1930. There will be fewer automobiles produced, less building and a smaller iron and steel production. Corporate earnings will be less and dividends will continue to be reduced or passed. During the second half-year the recovery will gather momentum gradually, especially if crop conditions are favorable, and by the time we meet again a year from now, business activity should be pretty well back to normal.

Pulp and Paper Industries in 1930

Our forecast of a year ago that the consumption of all grades of paper during the first half of 1930 would show some loss as compared with the first half of 1929 was allright, but our forecast of an increase in consumption in the second half-year was all wrong, because it was based on the incorrect assumption that

business recovery would begin not later than the Fall months. On the whole, the paper industry fared quite well during the first half of 1930. This was especially true of book paper and newsprint consumption. But during the second half-year when general business went into a second nose dive the paper industry was dragged down into the depression area along with everything else. As a result the consumption of all grades combined for the year was off about 12 per cent. Added to this, chemical pulp prices broke sharply and undermined the stability of paper and paperboard prices. The year ended with kraft pulp down to $30.00 a ton, unbleached sulphite below $50.000 and bleached sulphite below $60.00 a ton. Groundwood prices, if anything, were firmer in the second half-year than in the first half, due to the curtailment of production caused by the drought.

Pulp Outlook for 1931

Chemical pulp prices have weakened further since the first of the year. Unbleached sulphite is now selling for less than $40.00 a ton and bleached sulphite for as low as $55.00 a ton. These prices are so low that they are not likely to go any lower, and as soon as the demand increases they will probably advance somewhat from this ruinously low level. There is a serious risk in this situation for those manufacturers, who have contracted ahead to supply paper at rock bottom prices, without protecting themselves for the necessary supply of pulp at the prices used in figuring their quotations for the finished product.

Paper Outlook for 1931

If our forecast for general business is correct, it is quite certain that the consumption of all grades of paper for the first half of 1931 will fall somewhat below the consumption for the corresponding period of 1930, while the consumption for the second half-year will run ahead of 1930. For the year 1931, as a whole, consumption will do well to equal that for 1930, but the trend at the end of the year will be strongly upward as compared with a downward trend at the end of 1930.

Production, of course, depends upon imports and exports and stocks on hand, as well as upon consumption, but for all grades of paper except newsprint, imports and exports are not important. Stocks of paper in the hands of consumers and merchants are, generally speaking, probably small and stocks in the hands of the mills, in most cases, are not excessive, so that production will be pretty closely related to consumption for all grades except newsprint. In other words, for the first half-year production will be less than for the corresponding period of 1930, while for the second half-year it will be larger, with the total for the year about equal to the 1930 total.

Since there is likely to be some increase in capacity in 1931 in practically every grade, due either to the addition of new machines, or to increased efficiency, or both, it seems quite likely that the rate of operation will average generally lower in 1931 than in 1930—in other words, that there will be a greater surplus capacity. This means increased competition and a weak price situation at least for the first half-year.

1931 A Year of Opportunity

Those concerns who have courage, vision and confidence in the future of this country will make use of this period of readjustment to prepare for the next period of prosperity, which is surely coming. In fact, many are doing this very thing now, so that when prosperity does return they will be ready to take full advantage of it. This is the logical time to go over each manufacturing operation with a fine-toothed comb, to make sure that wastes are eliminated and the maximum efficiency is obtained. This is also the logical time to make a careful survey of the markets for the grades of paper produced to find out what grades can be most profitably produced and sold, what are the logical markets for these grades, and how much they can be expected to take. In other words, this is the time to build up sales organizations and sales data, instead of tearing them down as some short- sighted concerns are so foolishly doing.

What is true of individual concerns, is equally true of the trade associations in the various branches of the industry. Instead of their being disbanded or crippled in their activities as unfortunately has happened in some instances they should be built to maximum efficiency. Fortunate, indeed, is that branch of the industry which has had the good sense to maintain its association activities unimpaired during this severe depression. It will be well rewarded for its investment in promoting cooperation and mutual help. Cooperative efforts may break down in times of severe stress, but if the machinery remains intact, they can be quickly restored as soon as pressure is eased. The industry, that has a good association functioning now, will be able to pull itself out of its difficulties much more quickly than one which has no such agency.

In the work of checking manufacturing operations to secure maximum efficiency and in the work of analyzing markets to ascertain the grades, which a mill can most profitably produce the cost man can render invaluable service. The wise management will make greater use of his cost department and cost data in 1931 than he has in the past and the wise cost man will appreciate more than ever before what a great opportunity he has to help his company succeed and prosper. What all branches of business need most now is confidence in the future of this country.

This depression has reminded us of many things that we seem to have forgotten during the period of prosperity that ended in 1929. It has made us humble in spirit and more ready to listen and to learn. If the paper industry takes these lessons to heart and profits by the mistakes of the past, the depression may turn out to be a blessing in disguise instead of an unmitigated evil.

Early Days of Bagley & Sewall Co.

Watertown, N. Y., February 23, 1931—An interesting description of the early days of the Bagley & Sewall Company, is given by former Mayor Charles D. Bingham, who has just retired as treasurer. He plans, however, to continue with the company in an advisory capacity. The company has been turning out vises under contract for many years and it is understood that Mr. Bingham will continue to supervise that department in view of his knowledge of that branch of the business. The retiring executive is the inventor of a number of devices which have proved beneficial to the paper industry and his advice on important matters is constantly sought. His connections with the firm dates back to 1887 when he secured the position as bookkeeper.

"At that time," said Mr. Bingham, "the company was engaged principally in the manufacture of printing presses which did not turn out very profitable and incidentially I believe this unfortunate venture contributed to the death of Mr. Sewall. The surviving partner, Mr. Bagley, was a very strong and aggressive business man and he decided to recoup his losses by embarking in the manufacture of paper machinery. This plan was also favored by other stockholders and an engineer from Wilmington, Del., was secured to start the new line of work here. The company built its first paper machine about forty years ago and has been gradually extending its business since to include numerous devices used in paper mills. The firm was also in touch with the beginning of the manufacture of wood pulp for turning out paper. The patent for the machine for the conversion of the wood pulp was owned by Voelter and the Bagley & Sewall Company finally made arrangements for taking over the patent rights in this country. Therefore, we were really closely in touch with paper manufacturers in this vicinity before we thought of making machinery for the production of paper sheets. The inventor secured his royalties from the firms using the machines and not the maker."

Mr. Bingham has had a lengthy career in the business life of this section. Prior to becoming connected with the Bagley & Sewall Company he was associated with the old Eames Vacuum Brake Company in an executive capacity until that business was dissolved about 1880. Among his greatest pleasures now is to spend a portion of his time in his workshop which boasts of thousands of instruments, many of which he perfected himself.

Cost Section

CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Detroit, Mich.—In connection with recent acquisition of the Baeder Adamson Company, Allegheny avenue and Richmond street, Philadelphia, Pa., manufacturer of waterproof sandpaper, etc., the Minnesota Mining & Manufacturing Company, St. Paul, Minn., has arranged for the removal of a portion of the Philadelphia works to its branch plant on East Milwaukee avenue, Detroit, comprising primarily the tan fibre and waterproof gasket divisions. It is understood that production of products noted will be expanded and concentrated at the new location.

Appleton, Wis.—The Riverside Paper Corporation, South Lawe street, has awarded a general contract to the C. R. Meyer & Sons Company, 50 State street, Oshkosh, Wis., for a new one-story brick addition, to be 47 x 60 feet, designed primarily for storage and distributing service. Estimated cost has not been announced; superstructure will be placed under way at once. It is understood that this company has secured certain machinery formerly used at the plant of the Union Paper Mill Company, Monongahela, Pa., now defunct, (incorrectly noted in last issue of this journal as located at Tacoma, Wash.) and will utilize at its mill. The company has engaged Charles A. Cahill & Sons, 724 East Mason street, Milwaukee, Wis., engineers, to make a survey of the present power facilities at its mill, with view to recommending necessary changes for increased efficiency and economy.

New York, N. Y.—S. J. Redlich, Inc., 61 Wooster street, New York, manufacturer of paper boxes and containers, has leased space in the building at 35-37 Wooster street, and will occupy for expansion. It is understood that present plant will be removed to new location and capacity increased.

Grand Rapids, Minn.—The Blandin Paper Company, Grand Rapids, has placed an order with the Allis-Chalmers Manufacturing Company, West Allis, Wis., for a 4,000-kw. turbo-generator unit for installation at its mill, including auxiliary equipment, to be used in connection with a general expansion program now under way to develop increased capacity. Work is progressing rapidly on the project, which is estimated to cost over $150,000 for initial unit. The James Leck Company, 211 South Eleventh street, Minneapolis, Minn., is general contractor. The Jacobsen Engineering Company, Plymouth Building, Minneapolis, is engineer.

Panama City, Fla.—The Southern Kraft Corporation, a subsidiary of the International Paper Company, 100 East Forty-second street, New York, is engaged in finishing work on a portion of its new local mill, on which construction has been in progress for a number of months past. Buildings now nearing completion include main mill unit, digester building, heater room, shipping and distributing room and power plant. An award for plumbing, etc., has been let to the Panama Machinery and Supply Company, Panama City. The new mill will be given over to the production of kraft papers and is reported to represent an investment of more than $1,500,000, including equipment.

New York, N. Y.—The Recovery Process, Inc., care of James F. Lynch, 165 Broadway, attorney, has been organized with a capital of $100,000, and proposes operation of a plant for paper production under a special process. William F. Gerecke, 75 Bruce avenue, is one of the incorporators of the company.

Wilmington, Del.—Following receipt of a Government contract for 10,000,000 pounds of postcard stock, the Jessup & Moore Paper Company is said to be arranging to step-up production at its mills, insuring steady employment for the working forces at the different plants. The pulp will be made at the Delaware and Elkton mills. The bristol board will be produced in rolls of 1000 pounds each.

Aurora, Ill.—The Miller, Bryant & Pierce Company, 225 South River street, Aurora, manufacturer of carbon papers and kindred products, has asked bids on general contract for proposed new addition to plant, consisting of a three-story side extension, and additional fourth story on south wing, estimated to cost about $80,000, with equipment. It is expected to award contract so as to proceed with superstructure early in April. Frank D. Chase, Inc., 720 North Michigan avenue, Chicago, Ill., is architect and engineer. S. E. Miller is president.

Buckingham, Que.—The Maclaren-Quebec Power Company, a subsidiary interest of the James Maclaren Company, Buckingham, operating paper mill properties, is disposing of a bond issue of $12,000,000, a portion of the proceeds to be used for a new hydroelectric power project at Masson Falls, below High Falls, about 30 miles from Ottawa, designed for an ultimate capacity of 130,000 horsepower; the initial unit of the new plant is scheduled to be ready for service in July, 1933. The power company is now operating a hydroelectric power plant at High Falls, with a capacity of 86,000 horsepower, and which will be increased to 115,000 horsepower in the future. The company is furnishing power for paper mill service to the parent organization, totaling 66,000 horsepower, the remainder of the output, including new station development, will be used by the Hydro-Electric Power Commission of Ontario, aggregating 125,000 horsepower. A general contract for the new development at Masson Falls has just been let to the Foundation Company of Canada, Montreal, which also had the contract for the newsprint mill of the parent company at Buckingham. Albert Maclaren is president of the Maclaren-Quebec Power Company.

Newark, Del.—At the request of officers of the Curtis & Brother Company, operating a local paper mill, Chancellor Josiah O. Wolcott has appointed Herbert W. Mason, treasurer and general manager, and Charles M. Levis, president, receivers of the company. The mill was established over 100 years ago. The financial difficulty is said to be the result of the recent failure of the Aldine Trust Company, Philadelphia, Pa., the principal banking connection of the paper company. Assets are stated to exceed liabilities.

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MONTREAL, P. Q.

IMPORTS OF PAPER AND PAPER STOCK

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING FEBRUARY 21, 1931

SUMMARY

Cigarette paper	358 cs.
Wall paper	4 pkgs., 40 bls., 5 cs.
Paper hangings	9 bls., 5 cs.
News print	3,851 rolls
Printing paper	72 bls., 179 cs.
Wrapping paper	2 bls., 17 cs.
Packing paper	147 bls.
Painted paper	1 ble., 1 cs.
Bristol boards	2 cs.
Filter paper	20 bls., 25 cs.
Fancy paper	1 cs.
Writing paper	6 cs.
Tissue paper	3 cs.
Basic paper	104 cs.
Baryta coated paper	25 cs.
Metal covered paper	7 cs.
Surface coated paper	74 cs.
Wafer paper	12 cs.
Stencil paper	8 cs.
Blotting paper	1 cs.
Paper board	30 cs.
Card board boxes	16 cs.
Straw boards	1,200 bdls.
Miscellaneous paper	240 rolls, 219 bls., 87 cs.

CIGARETTE PAPER

Champagne Paper Corp., Vincent, Havre, 274 cs.
P. J. Schweitzer, Pres. Adams, Marseilles, 84 cs.

WALL PAPER

Cohen & Mann, Ausonia, Liverpool, 1 cs.
Thomas & Pierson, Olympic, Southampton, 2 cs.
R. F. Downing & Co., Olympic, Southampton, 2 cs.
R. F. Downing & Co., Kwanto Maru, Kobe, 21 bls.
F. J. Emmerich, Scythia, Liverpool, 19 bls.
J. E. Bernard & Co., Samland, Antwerp, 4 pkgs.

PAPER HANGINGS

W. H. S. Lloyd & Co., Amer. Farmer, London, 4 cs., 8 bls.
Whiting & Patterson Co., Inc., Olympic, Southampton, 1 cs., 1 ble.

NEWS PRINT

Jay Madden Corp., Gen'l Von Steuben, Bremen, 135 rolls.
W. H. Bell, Markland, Liverpool, N. S., 3,550 rolls.
Parsons & Whittemore, Inc., Gripsholm, Gothenburg, 166 rolls.

PRINTING PAPER

C. Steiner, Gen'l Von Steuben, Bremen, 11 cs.
C. Steiner, N. Amsterdam, Rotterdam, 1 cs., 72 bls.
International Forwarding Co., N. Amsterdam, Rotterdam, 44 cs.
E. Dietzgen & Co., Inc., N. Amsterdam, Rotterdam, 74 cs.
E. Dietzgen & Co., Inc., Sac City, Rotterdam, 25 cs.
Japan Paper Co., Amer. Farmer, London, 2 cs.
T. N. Fairbanks Co., Saturnia, Trieste, 22 cs.

WRAPPING PAPER

Sylvania Industrial Corp., Samland, Antwerp, 17 cs., 2 bls.

PACKING PAPER

J. P. Hefferman Paper Co., Samland, Antwerp, 147 bls.

PAINTED PAPER

F. J. Emmerich, Paris, Havre, 1 cs., 1 ble.

BRISTOL BOARDS

Keuffel & Esser Co., Ausonia, Liverpool, 2 cs.

FILTER PAPER

H. Reeve Angel & Co., Inc., Olympic, Southampton, 20 bls., 16 cs.
H. Reeve Angel & Co., Inc., Ausonia, Liverpool, 8 cs.
American Express Co., Ausonia, Liverpool, 1 cs.

FANCY PAPER

H. Fuchs & Son, Sac City, Rotterdam, 1 cs.

WRITING PAPER

Coenca Morrison & Co., Paris, Havre, 6 cs.

TISSUE PAPER

Meadows, Wye & Co., Scythia, Liverpool, 3 cs.

BASIC PAPER

Globe Shipping Co., Gen'l Von Steuben, Bremen, 11 cs.
C. Bruning Co., Inc., Sac City, Rotterdam, 93 cs.

BARYTA COATED PAPER

Globe Shipping Co., Gen'l Von Steuben, Bremen, 25 cs.

METAL COVERED PAPER

E. B. Baehr, Gen'l Von Steuben, Bremen, 7 cs.

SURFACE COATED PAPER

Gevaert Co. of America, Samland, Antwerp, 74 cs.

WAFER PAPER

Ipex, N. Amsterdam, Rotterdam, 12 cs.

STENCIL PAPER

J. H. Schroeder Banking Corp., Gen'l Von Steuben, Bremen, 8 cs.

BLOTTING PAPER

J. P. Morgan & Co., Amer. Farmer, London, 1 cs.

PAPER BOARD

Colmar Paper Corp., Samland, Antwerp, 30 cs.

CARD BOARD BOXES

P. Seguin, Pres. Adams, Marseilles, 16 cs.

STRAW BOARDS

A. B. Massa Corp., Sac City, Rotterdam, 1,200 bdls.

MISCELLANEOUS PAPER

L. A. Consmiller, Gen'l Von Steuben, Bremen, 6 cs.
Hensel, Bruckman & Lorbacher, Gen'l Von Steuben, Bremen, 2 cs.
Heemsoth, Basse & Co., N. Amsterdam, Rotterdam, 60 bls.
Keuffel & Esser, N. Amsterdam, Rotterdam, 9 cs.
J. Beckhard Co., N. Amsterdam, Rotterdam, 4 cs.
Keller Dorian Paper Co., Paris, Havre, 9 cs.
Houbigant, Inc., Paris, Havre, 4 cs.
Japan Paper Co., Paris, Havre, 10 cs.
J. E. Bernard & Co., Paris, Havre, 7 cs.
H. Reeve Angel & Co., Inc., Gripsholm, Gothenburg, 10 rolls, 12 bls.
D. S. Walton & Co., Gripsholm, Gothenburg, 41 rolls.
Furness, Withy & Co., Gripsholm, Gothenburg, 102 rolls.
Kreamer & Co., Gripsholm, Gothenburg, 147 bls.
The Borregaard Co., Inc., Gripsholm, Gothenburg, 87 rolls.
E. H. Sargent & Co., Gripsholm, Gothenburg, 2 cs.
Corn Exchange Bank, Kwanto Maru, Kobe, 29 cs.
Keller Dorian Paper Co., Pres. Adams, Marseilles, 5 cs.

RAGS, BAGGINGS, ETC.

Darmstadt, Scott & Courtney, Vincent, Dunkirk, 73 bls. bagging.
Royal Manufacturing Co., Vincent, Havre, 43 bls. cotton waste.
Castle & Overton, Inc., Artigas, Manchester, 62 bls. rags.
——, Artigas, Liverpool, 66 bls. bagging.
Atlas Waste Manfg. Co., Cornelia, San Juan, 15 bls. rags.
S. Birkenstein & Son, California, Glasgow, 66 bls. rags.

OLD ROPE

W. Steck & Co., Marengo, Aberdeen, 89 coils.
——, Jalapa, Avonmouth, 51 coils.
Chemical Bank & Trust Co., Clara, Trieste, 54 coils.

CASEIN

Kaibfleisch Corp., Amer. Legion, Buenos Ayres, 84 bags.

WOOD PULP

Price & Pierce, Ltd., Bird City, Hernosand, 1,200 bls. sulphite, 200 tons.
Bulkley, Dunton & Co., Bird City, ——, 4,200 bls. sulphite, 700 tons.
Bulkley, Dunton & Co., Sac City, ——, 110 bls. wood pulp, 22 tons.
M. Gottesman & Co., Inc., Gripsholm, Gothenburg, 2,550 bls. sulphite.
Parsons & Whittemore, Inc., Gripsholm, Gothenburg, 150 bls. sulphite.
Parsons & Whittemore, Inc., Gripsholm, Gothenburg, 360 bls. sulphate.
Perkins, Goodwin & Co., Gripsholm, Gothenburg, 315 bls. sulphate.
E. M. Sergeant & Co., Gripsholm, Gothenburg, 449 bls. kraft soda pulp.
Price & Pierce, Ltd., Gripsholm, Gothenburg, 125 bls. wood pulp.
R. Gair, Laura Annie Barnes, Lunenburg, N. S., 3,997 bls. ground pulp.
R. Gair, Laura Annie Barnes, Lunenburg, N. S., 388 half bls. ground pulp.
New Haven Pulp & Board Co., Laura Annie Barnes, Lunenburg, N. S., 9,507 bls. ground pulp.
New Haven Pulp & Board Co., Laura Annie Barnes, Lunenburg, N. S., 1,108 half bls. ground pulp.

WOOD FLOUR

The Burnet Co., N. Amsterdam, Rotterdam, 50 bags.
State Chemical Co., N. Amsterdam, Rotterdam, 775 bags.

BOSTON IMPORTS

WEEK ENDING FEBRUARY 21, 1931

Price & Pierce, Ltd., Bird City, Wallvik, 4,800 bls. sulphate pulp, 800 tons.
Hone & Downer, Bird City, Helsingfors, 43 rolls news print.
G. F. Malcolm & Co., Scythia, Liverpool, 56 cs. tissue paper.
Oxford University Press, Scythia, Liverpool, 5 cs. printing paper.
Russell McCandless, Kolsnaren, Oslo, 400 bls. unbleached sulphite pulp.
Russell McCandless, Kolsnaren, Oslo, 500 bls. mechanical pulp.

NEW HAVEN IMPORTS

WEEK ENDING FEBRUARY 21, 1931

New Haven Pulp & Board Co., Laura Annie Barnes, Lunenburg, N. S., 720 half bls. and 5,510 bls. ground pulp.

PORTLAND IMPORTS

WEEK ENDING FEBRUARY 21, 1931

Price & Pierce, Ltd., Bird City, Wallvik, 20,815 bls. sulphate pulp, 3,469 tons.
H. Reeve Angel & Co., Inc., Bird City, Helsingfors, 53 rolls news print.

BALTIMORE IMPORTS

WEEK ENDING FEBRUARY 21, 1931

Price & Pierce, Ltd., Bird City, Wallvik, 1,805 bls. sulphate pulp, 300 tons.
Price & Pierce, Ltd., Bird City, Hernosand, 3,000 bls. sulphite pulp, 500 tons.
Lagerloef Trading Co., Bird City, Helsingfors, 140 bls. wood pulp, 28 tons.
Irving Trust Co., Bird City, Helsingfors, 250 bls. wood pulp, 127 tons.
Union Trust Co., Artigas, Manchester, 28 bls. rags.
Russell McCandless, Carlsholm, Stockholm, 300 bls. unbleached sulphite pulp.
Russell McCandless, Carlsholm, Stockholm, 375 bls. kraft pulp.

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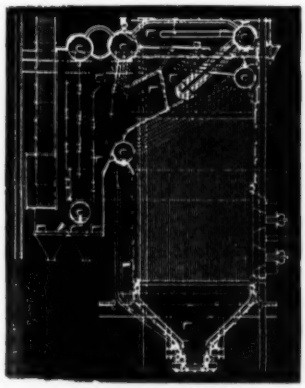

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Trade Mark Department

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The following are trade mark applications pertinent to the paper field pending in the United States Patent Office, which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade-Mark Company, 900 F street, N. W., Washington, D. C., trademark specialists. As an additional service feature to its readers, PAPER TRADE JOURNAL gladly offers to them an advance search free of charge on any mark they may contemplate adopting or registering.

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ICY No. 273,330 Alexander L. Sykes, doing business at the International Cordage & Yarn Company, New York City. For manila flax, jute, or the like rope.

ICY No. 273,331. Alexander L. Sykes, doing business as The International Cordage and Yarn Company, New York City. For fiber rope.

MERSEY, MERSEY PAPER COMPANY LIMITED No. 303,914. Mersey Paper Company, Limited, Brooklyn, Nova Scotia. For news print paper.

PRAISEWORTHY PARCHMENT No. 305,465. Skinner & Kennedy Printing Company, St. Louis, Mo. For bond paper.

TYRITE No. 306,231. Chase Bag Company, New York City. For paper bags.

DUOWRITE, and picture of lady writing with a quill pen. Ser. No. 298,525. Duo-write Stationery Company, Wichita, Kansas. For combined writing paper and envelopes.

VISTADEX. Ser. No. 302,680. James L. Garfield, Philadelphia, Pa. For card index to receive and to carry printed or written notations.

WPP, in a triangle. Ser. No. 305,644. Wayagamack Pulp and Paper Company, Limited. Three Rivers, Quebec, Canada. For kraft paper and pulp for making paper.

DAN. D. LIN. Ser. No. 306,597. Daniel Manufacturing Company, Rhinelander, Wis. For paper napkins, and paper towels.

EAGLEGRAM, and representation of an eagle, etc. Ser. No. 301,928. The Insurance Forms Association, Inc., San Francisco, Cal. For mailing and correspondence envelopes, writing paper, wrapping paper, post cards.

HOMSTOR. Ser. No. 306,256. Badger Tissue Mills, Kaukauna, Wis. For toilet paper, paper towels, paper napkins, and paper table covers.

THE TOWN LEADER. Ser. No. 298,504. Lenoir Book Company, Lenoir, N. C. For stationery tablets, and composition books.

GATEWAY. Ser. No. 306,806. Badger Paper Mills, Inc., Peshtigo, Wis. For writing and printing papers.

TNT—No. 299,953. Buffalo Envelope Company, Buffalo, N. Y. For correspondence, envelopes.

PEACOCK with picture of a peacock—No. 304,236. The T. J. Cardoza Company, San Francisco, Cal. For binder covers.

SITROUX—No. 304,257. Sitroux Importing Company, New York City. For facial and wiping tissue.

TEMPO—No. 296,992. Vereinigte Papierwerke Aktiengesellschaft, Nuremberg, Germany. For paper handkerchiefs, paper mats, toilet paper, sanitary towels made of paper, etc.

DAMASKLIN NEAR LINEN—No. 297,914. Hoberg Paper and Fibre Company, Green Bay, Wis. For paper napkins.

EVENGLO—No. 307,527. Fort Howard Paper Company, Green Bay, Wis. For paper towels, napkins, tissue paper, toilet paper, etc.

L. A. CITY HALL—No. 306092. Eugene N. Edwards, Los Angeles, Cal. For bond paper.

KRAFT-WELD—No. 306,505. Paper Manufacturers Company, Inc., Philadelphia, Pa. For gummed paper tape.

REDIPAK THE LIGHTNING CONTAINER—No. 306,225. Empire Box Corporation, Chicago, Ill. For paper boxes and cartons.

UNION LONGHORN. Ser. No. 307,541. Union Bag and Paper Corporation, New York City. For paper bags.

CLAFFBOX, in oval. Ser. No. 304,313. M. B. Claff & Sons, Inc., Randolph, Mass. For paper boxes.

TRICOLATOR. Ser. No. 307,333. Tricolater Company, Inc., New York City. For filter papers made of fibrous material.

SUPER-TEX. Ser. No. 306,995. The Cooke & Cobb Company, Brooklyn, N. Y. For expanding files, pocket wallets, filing covers, binders, folders, and envelopes for holding letters, documents and the like.

SELECTOGRAPH. Ser. No. 300,537. National Selectograph Corporation, San Francisco, Cal. For index cards, cards and forms used to carry record data thereon.

HOME CIRCLE. and representation of a circle. Ser. No. 303,742. Fall River Retail Grocers and Marketmen's Assn., Fall River, Mass. For toilet tissue.

SANTA-GRAM. Ser. No. 306,858. Edwards & Deutsch Litho-Lithographing Company, Chicago, Ill. For letter heads, correspondence forms, and partially-printed forms sold as such.

SANTA--GRAM. Ser. No. 306,858. Edwards & Deutsch Lithographing Company, Chicago, Ill. For letter heads, correspondence forms, and partiallyprinted forms sold as such.

VOTERGRAM. Ser. No. 306,859. Edwards & Deutsch Lithographing Company, Chicago, Ill. For letter heads, correspondence forms, and partially printed forms sold as such.

VANITY. Ser. No. 307,059. Royal Card and Paper Company, Inc., New York City. For decorated vellum and bristol papers.

WISCONSIN TRIBAL. Ser. No. 307,098. Kimberly-Clark Corp., Neenah, Wis. For cover papers.

Knowlton Bros. Cancel Action

[FROM OUR REGULAR CORRESPONDENT]

WATERTOWN, N. Y., February 24, 1931—The action started by Knowlton Brothers to compel performance of its contract with the Beebee Power Corporation relative to a development project in this city was cancelled early this week following a meeting of the latter concern when it was decided to carry out the agreement. The hydro-development project was launched early in 1920 but was suspended a few months later because of alleged high construction costs. In the action started by Knowlton Brothers it was alleged that $200,000 damages resulted in view of the fact that the company was obliged to purchase its power from other sources at increased costs. The development will probably be started early in the spring and will cost in the neighborhood of $800,000. Under plans announced the various owners of water rights about Beebee Island will secure their power requirements from the new development and the surplus power will be disposed of to the Niagara-Hudson Power Company. It was learned that the problem of disposing of the surplus energy had been the principal reason for holding back plans to proceed with the project.

Officials of Knowlton Brothers claim that the development will mean a substantial saving in power bills in addition to other benefits. The company has in the past been forced to meet large bills from acquiring its operating power from other sources and the new source of energy is expected to prove more economical.

The Beebee Power Corporation was organized in 1919 and its agreement with owners of power rights on Beebee Island provided that the development would be carried out in 1920 and that each should draw power from the entire generated supply, according to percentage of the total amount. Only recently the company was reorganized when new officers and directors were chosen because a few of the original members had passed away.

James C. Taylor Dies Suddenly

James C. Taylor, aged fifty-seven, died suddenly last Thursday at the Hotel Roosevelt. Dr. Ross, the hotel physician, said death was apparently due to natural causes. Mr. Taylor, an official of the Crane Paper Company, had been attending the Annual Convention of the American Paper and Pulp Association in New York.

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Write for Descriptive Bulletin V-103.

FAIRBANKS COMPANY

BOSTON NEW YORK PITTSBURGH

Distributors Everywhere

New York Market Review

Office of the PAPER TRADE JOURNAL.
Wednesday, February 25, 1931.

Trading in the local paper market was slightly more active during the past week, due to some extent to the opportunities to get together afforded by the Convention. Practically all the various standard grades of paper were in fairly satisfactory request and even greater activity is anticipated now that the Spring campaign is well under way.

Production of news print is being maintained at approximately 60 per cent of rated capacity at United States and Canadian mills. Contract shipments are going forward in fairly good volume. Stocks at the mills are reported to be not duly excessive. The price situation continues practically unchanged, although efforts are still being made to stabilize the industry.

Some improvement was noticed in the paper board market. Box board offerings are about sufficient to take care of prevailing requirements. The price situation is little changed. Standard 85 test liner board is now quoted at from $35.000 to $37.50 per ton, adjusted for contract quantities, and spot deliveries at $40.00 per ton. No radical changes were reported in either the fine or coarse paper markets.

Mechanical Pulp

The ground wood market is in a sound position statistically, as, while demand is rather quiet, offerings of both domestic and imported mechanical pulp are limited, due to curtailment of operations here and abroad. Inquiries for future needs are fairly numerous. Prices are generally holding to previously quoted levels and there is little talk of concessions around.

Chemical Pulp

Conditions in the chemical pulp market are little changed. Several price revisions have been announced. Imported bleached sulphite is now quoted at from $2.80 to $4.25; Easy bleaching at from $2.35 to $2.60; Mitcherlich unbleached at from $2.10 to $2.70; No. 2 strong unbleached at from $1.90 to $2.00; No. 1 kraft at from $1.40 to $1.75; and No. 2 kraft at from $1.35 to $1.55 per 100 pounds, on dock, Atlantic Ports. Domestic bleached soda pulp is now selling at $3.00 per 100 pounds, delivered.

Old Rope and Bagging

The old rope market was rather dull during the past week. There was only a moderate demand for domestic and foreign old manila rope. Small mixed rope was also quiet. Old rope prices, however, continue fairly steady. The bagging market was moderately active. Gunny bagging and roofing bagging were in better request than scrap bagging. The price situation is unchanged.

Rags

Demand for the various grades of domestic rags appears to be gradually expanding Cotton grades are exhibiting a sounder undertone and roofing grades are in better request than for some time past. Mixed grades are rather quiet at present. The feature of the imported rag market is the increased interest being manifested in roofing grades. Prices continue fairly steady.

Waste Paper

Board mills are beginning to display more interest in the lower grades of paper stock. Strictly folded news and No. 1 mixed paper, in particular, are in better demand than of late. The better grades of waste paper are steady. Hard white shavings are in excellent request but offerings are decidedly limited. Prices are generally holding to previously quoted levels.

Twine

Most of the business transacted in the local twine market during the past week was along seasonal lines. Demand for the various grades is about normal for the time of year and an expansion of trading is confidentially expected with the usual Spring rush for supplies. Prices are holding up fairly well and reports of shading are infrequent.

Boston Paper Trade Happenings

Olney W. Washburn, of Weston, Mass., for ten years salesman for the Columbian Rope Company, has taken a similar position with Massey & Wendell, Inc. Mr. Washburn is a specialist in hard and soft fiber twines and manila rope, and covered Maine, New Hampshire and Eastern Massachusetts. He will continue to sell these lines and also paper specialties, particularly those in the fine paper division handled by Massey & Wendell. Previous to his work for the Columbian Rope Company, Mr. Washburn, who is a World War veteran, was connected with Arthur Brisbane and in the office with him.

"How" for February, published by Tileston & Hollingsworth Company, edited by A. V. Howland, contains several articles, written with the verve which characterizes this house organ. The issue is printed on Crinoline text, wove, white, and Crinoline cover ivory.

F. F. Spaulding, president of Spaulding & Tewksbury Company, box board dealers, is away on a trip, but is expected to return this week.

Harry H. Rutter, treasurer of Rutter & McNaught, Inc., passed the week-end at Monomoy Point, Chatham, Mass.

A son was recently born to Mr. and Mrs. Charles W. Whittaker. Mr. Whittaker is superintendent of the board mill of the Natick Box and Board Company, Natick, Mass.

Allied Mills Open Chicago Office

Alex G. Gilman, president of the Allied Paper Mills, Kalamazoo, Mich., announces the opening of the company's new Chicago office, located at Suite 2307 Chicago Daily News Building, 400 W. Madison street, in charge of Mr. Courtney H. Reeves, Manager. The company feels that with this office, it will be able to render more efficient service to its merchant friends in Chicago.

Goes With Equitable Bag

Mace A. Buxton has been appointed New England sales manager for the Equitable Paper Bag Company, Inc., of Brooklyn, N. Y. Mr. Buxton will make his headquarters in Boston. He will cover the trade in the New England states with which territory he is very familiar as he has worked in this section of the country for the past twelve years.

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133-39 Finsbury Pavement, London, E. C. R. J. MARX SOLE AGENTS FOR EUROPE

Miscellaneous Markets

Office of the PAPER TRADE JOURNAL
Wednesday, February 25, 1931

BLANC FIXE.—The blanc fixe market was moderately active during the past week. Contract shipments are moving in seasonal volume. Prices are steady. The pulp is still quoted at from $42.50 to $45.00 per ton, while the powder is selling at from 3¾ cents to 4½ cents per pound, in barrels, at works.

BLEACHING POWDER.—Steadiness prevails in the bleaching powder market. The contract movement is well up to average for the time of year. Prices are generally holding to previously quoted levels, without difficulty. Bleaching powder is selling at from $2.00 to $2.35 per 100 pounds, in drums, at works.

CASEIN.—The position of the casein market is practically unchanged. Domestic standard ground is still quoted at 8½ cents and finely ground at 11½ cents per pound. Argentine standard ground is selling at 10 cents and finely ground at 11 cents per pound, all in bags, car lot quantities.

CAUSTIC SODA.—Demand for caustic soda was fairly satisfactory. Shipments against contract are going forward at a normal pace. Prices are unchanged. Solid caustic soda is quoted at from $2.50 to $2.55, while the flake and the ground are selling at from $2.90 to $2.95 per 100 pounds, in large drums, at works.

CHINA CLAY.—The china clay market is exhibiting a fairly strong undertone. Contract shipments are moving to the paper mills in good volume. Prices are unchanged. Imported china clay is quoted at from $13 to $21 per ton, while domestic paper making clay is selling at from $8 to $13 per ton, at mine.

CHLORINE.—Supplies of chlorine are going forward to the paper mills with regularity. Demand is fairly satisfactory and inquiries for future needs are frequent. Prices are generally holding to schedule. Chlorine is quoted at $2.50 per 100 pounds, in tanks, or multi-unit cars, in ton lots, or over, at works.

ROSIN.—No radical changes were reported in the rosin market. Prices fluctuated slightly. The grades of gum rosin used in the paper mills are now quoted at from $5.25 to $5.60 per 280 pounds, in barrels, at yards. Wood rosin is selling at $4.00 per 280 pounds, in car lots, at southern shipping points.

SALT CAKE.—The salt cake market is displaying a steadier trend than for some time past. Shipments against contract are moving in good volume. Salt cake is still quoted at from $16 to $17; German salt cake at from $15.50 to $16, and chrome salt cake at from $14 to $15 per ton, in bulk, at works.

SODA ASH.—Trading in the soda ash market was rather light during the past week. The contract movement, however, was well up to average. Prices remain unaltered. Contract quotations on soda ash, in car lots, at works, per 100 pounds, are as follows: in bulk, $1.00; in bags, $1.15; and in barrels, $1.38.

STARCH.—Further weaknesses developed in the starch market and prices declined. The contract movement is satisfactory for the time of year. Inquiries for future needs are fairly numerous. Special paper making starch is now quoted at $2.92, in bags; and at $3.19 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—Conditions in the sulphate of alumina market are practically unchanged. Demand is fairly active and prices are generally holding to schedule. Commercial grades are quoted at from $1.25 to $1.40; while iron free is selling at from $1.90 to $2.05 per 100 pounds, in barrels, at works.

SULPHUR.—Offerings of sulphur are sufficient to take care of current requirements. Sulphur is still quoted at $18 per long ton, on orders of 1,000 tons, or over, on yearly contracts; and at $20 per ton for any smaller quantity over that period. On spot and near by car loads the quotation is $21 per ton.

TALC.—Most of the business transacted in the talc market was along routine lines. Demand is normal for the season. Prices are generally unchanged. Domestic talc is quoted at from $16 to $18 per ton, in bulk; while imported talc is selling at from $18 to $22 per ton, in bags, ship side.

Market Quotations

Paper
(F. o. b. Mill)

Ledgers	11.00	@	38.00
Bonds	6.75	@	53.25
Writings—			
Extra Superfine	14.00	@	32.00
Superfine	14.00	@	32.00
Tub sized	10.00	@	15.00
Engine sized	6.75	@	11.00
Book, Cased—			
S. & S. C.	5.50	@	—
M. F.	5.25	@	—
Coated and Enamel	7.00	@	10.50
Lithograph	7.50	@	12.00
Tissues—Per Ream—			
White No. 1	.65	@	.67½
Anti-Tarnish M G only	.65	@	.70
Colored	.70	@	.90
White No. 2	.55	@	.57½
Kraft	.65	@	.70
Manila	.55	@	.57½
Kraft—			
No. 1 Domestic	4.25	@	5.30
No. 2 Domestic	3.00	@	3.75
Southern	3.00	@	3.75
Imported	6.00	@	7.00
Manila—			
No. 1 Jute	9.00	@	9.25
No. 2 Jute	7.75	@	8.50
No. 1 Wood	4.00	@	5.25
No. 2 Wood	3.50	@	4.00
Butchers	3.37½	@	—
Fibre Papers—			
No. 1 Fibre	4.25	@	5.50
No. 2 Fibre	4.00	@	4.75
Common Bogus	1.50	@	3.00
Screenings	2.00	@	3.00
Card Middles	4.00	@	5.00
Glassine—			
Bleached, basis 25 lbs., No. 1	.09¾	@	—
No. 2	.11¼	@	—
Bleached, basis 20 lbs.	.11¼	@	—
(Delivered New York)			
News, per ton—			
Rolls, contract	62.00	@	—
Rolls, spot	62.00	@	—
Sheets	67.00	@	—
Side Runs	47.00	@	52.00
Boards—per ton—			
News	32.50	@	35.00
Straw	40.00	@	45.00
Chip	30.00	@	32.00
Binders' Boards	65.00	@	70.00
Standard 85 Test Liner	35.00	@	40.00
Sgl. Mla. Lt. Chip. (F. o. b. Mill)	42.50	@	—
Wood Pulp Boards	70.00	@	80.00

Mechanical Pulp
(On Dock)

No. 1 Imported—			
Moist	28.00	@	32.00
Dry	30.00	@	34.00
(F. o. b. Mill)			
No. 1 Domestic	28.00	@	34.00

Chemical Pulp
(On Dock, Atlantic Ports)

Sulphite (Imported)—			
Bleached	2.80	@	4.25
Easy Bleaching	2.35	@	2.60
No. 1 strong unbleached	2.00	@	2.65
Mitscherlich unbleached	2.10	@	2.70
No. 2 strong unbleached	1.90	@	2.00
No. 1 Kraft	1.40	@	1.75
No. 2 Kraft	1.35	@	1.55
Sulphate—			
Bleached	3.00	@	3.50
(F. o. b. Pulp Mill)			
Sulphite (Domestic)—			
Bleached	2.40	@	4.75
Easy Bleaching Sulphite	2.25	@	2.75
News Sulphite	2.35	@	2.60
Mitscherlich	2.50	@	3.25
Kraft (Domestic)	1.60	@	2.75
(Delivered New York)			
Soda Bleached	3.00	@	—

Domestic Rags
New Rags
(Prices to Mill f. o. b N. Y.)

Shirt Cuttings—			
New White, No. 1	8.00	@	8.50
New White, No. 2	7.00	@	7.25
Silesias No. 1	6.00	@	6.50
New Unbleached	8.00	@	8.50
New Blue Prints	5.00	@	5.50
New Soft Blacks	4.00	@	4.50
Blue Overall	6.00	@	6.25
Washables	3.75	@	4.00
Fancy	4.00	@	4.50
Mixed Khaki Cuttings	4.25	@	5.25
Pink Corset Cuttings	6.50	@	7.00
O. D. Khaki Cuttings	5.15	@	5.75
Men's Corduroy	3.00	@	3.50
New Mixed Blacks	3.00	@	3.25
Old Rags			
White, No. 1—			
Repacked	5.25	@	5.75
Miscellaneous	4.25	@	4.75
White, No. 2—			
Repacked	3.00	@	3.50
Miscellaneous	2.30	@	2.50
St. Soiled, White	1.50	@	1.75
Thirds and Blues—			
Repacked	2.25	@	2.50
Miscellaneous	1.65	@	1.85
Black Stockings	3.25	@	3.75
Roofing Rags—			
Cloth Strippings	1.25	@	1.30
No. 1	1.25	@	1.30
No. 2	.90	@	1.00
No. 3	.70	@	.80
No. 4	.65	@	.70
No. 5A	.50	@	.60

Foreign Rags
New Rags

New Dark Cuttings	2.15	@	2.40
New Mixed Cuttings	2.25	@	2.50
New Light Silesias	5.75	@	6.25
Light Flannelettes	6.25	@	6.75
Unbleached Cuttings	7.50	@	8.00
New White Cuttings	7.25	@	7.75
New Light Oxfords	5.75	@	6.25
New Light Prints	4.25	@	4.75
Old Rags			
No. 1 White Linens	7.00	@	7.50
No. 2 White Linens	5.50	@	6.00
No. 3 White Linens	4.00	@	4.50
No. 4 White Linens	2.50	@	3.00
No. 1 White Cotton	5.00	@	5.50
No. 2 White Cotton	4.00	@	4.50
No. 3 White Cotton	2.75	@	3.75
No. 4 White Cotton	1.60	@	1.75
Extra Light Prints	2.50	@	2.75
Ord. Light Prints	2.10	@	2.25
Med. Light Prints	1.65	@	1.75
Dutch Blue Cottons	1.90	@	2.10
French Blue Linens	2.65	@	2.75
German Blue Linens	2.25	@	2.40
German Blue Cottons	1.75	@	1.85
Checks and Blues	1.60	@	1.75
Lindsay Garments	1.10	@	1.20
Dark Cottons	.80	@	.90
Old Shopperies	.75	@	.80
New Shopperies	.75	@	.80
French Blues	1.80	@	1.90

Old Rope and Bagging
(Prices to Mill f. o. b. N. Y.)

Gunny No. 1—			
Foreign	1.65	@	1.80
Domestic	1.65	@	1.80
Wool Tares, light	1.30	@	1.40
Wool Tares, heavy	1.35	@	1.40
Bright Bagging	1.30	@	1.35
Small Mixed Rope	.90	@	1.00
Manila Rope—			
Foreign	2.50	@	2.60
Domestic	2.75	@	300
New Burlap Cut	2.25	@	2.50
Hessian Jute Threads—			
Foreign	2.60	@	2.75
Domestic	2.80	@	3.00

Old Waste Papers
(F. o. b. New York)

Shavings—			
Hard, white, No. 1	2.75	@	2.85
Hard White, No. 2	2.30	@	2.40
Soft, white, No. 1	2.50	@	2.60
White envelope cuttings	2.95	@	3.05
Flat Stock—			
Stitchless	.90	@	1.00
Overissue Mag.	.90	@	1.00
Solid Flat Book	.75	@	.85
Crumpled No. 1	.60	@	.70
Solid Book Ledger	1.90	@	2.00
Ledger Stock	.80	@	.90
New B. B. Chips	.20	@	.30
Manilas—			
New Env. Cut	2.00	@	2.20
New Cuttings	1.50	@	1.65
Extra No. 1 old	1.25	@	1.35
Print	.50	@	.60
Bogus Wrapper	.50	@	.60
Container	.25	@	.30
Old Kraft Machine—			
Compressed bales	1.20	@	1.30
News—			
No. 1 White News	1.70	@	1.80
Strictly Overissue	.40	@	.45
Strictly Folded	.30	@	.35
No. 1 Mixed Paper	.15	@	.20
Common Paper	Nominal		

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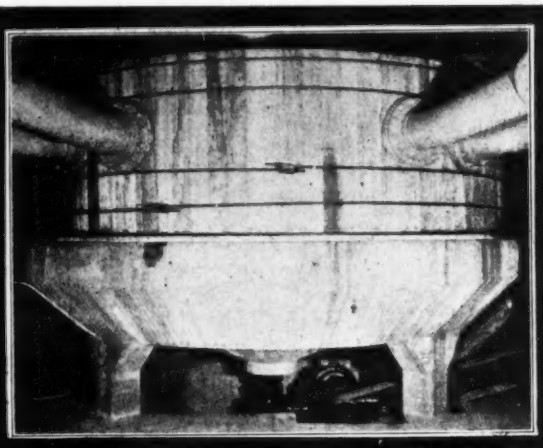

WOOD TANKS

Wood Staves Fitted to Concrete Conical Bottom—A Paper Mill Installation.

All tanks are accurately made and only the best material and workmanship are used in their construction.

No tanks carried in stock—all tanks made to order for your special purpose.

Our shipping facilities are unexcelled and we are prepared to fill all orders quickly.

We maintain a Special Department for the purpose of co-operating with Engineers and Chemists in determining the most suitable material and construction of tanks for their particular needs.

The Hauser-Stander Tank Co., *Cincinnati, Ohio*

Twines
(F. o. b. Mill)

Cotton—			
B. C., 18 basis	.32	@	.34
No. 1	.22	@	.24
No. 2	.21	@	.22
No. 3	.19	@	.20
A. Italian, 18 basis	.38	@	.39
Finished Jute—			
Dark 18 basis	.20½	@	.21
Light 18 basis	.22½	@	—
Jute Wrapping, 3-6 Ply—			
No. 1	.14¼	@	—
No. 2	.13¾	@	—
Tube Rope—			
4-ply and larger	.10¼	@	—
Fine Tube Rope—			
4-ply	.12¼	@	—
3-ply	.13¼	@	—
2-ply	.14¼	@	—
Paper Makers Twine			
Balls	.08¾	@	—
Box Twine, 2-3 ply	.09	@	.10
Jute Rope	.11	@	.12
Amer. Hemp, 6	.29	@	.31
Java Sisal			
No. 1 Basis	.12	@	—
No. 2 Basis	.11¼	@	—
New Zealand Sisal	.11½	@	—
Sisal Lath Yarn—			
No. 1	.14	@	.16
No. 2	.12	@	.14
Manila Twine	.22½	@	.24½

CHICAGO

Paper
(F. o. b. Mill)

Rag Bond	.30	@	.53¼
Water Marked Sulphite Bond	.09	@	.12
Sulphite Bond	.06¾	@	.11
Superfine Writing	.18	@	.24
No. 1 Fine Writing	.14	@	.18
No. 2 Fine Writing	.12	@	.14
No. 3 Fine Writing	.08½	@	.12
No. 1 M. F. Book	.06½	@	.07¼
No. 2 M. F. Book	.05¼	@	.06¼
No. 1 S.&S.C. Book	.06¾	@	.07¼
No. 2 S.&S.C. Book	.05¾	@	.06½
Coated Book	.07½	@	.12
Coated Label	.07½	@	.10
No. 1 Manila	.04¼	@	.05¼
No. 1 Fibre	.04¾	@	.05¼
No. 2 Manila	.04¼	@	.04¾
Butcher's Manila	.04	@	.04½
No. 1 Kraft	5.00	@	5.50
Southern Kraft	3.75	@	4.00
No. 2 Kraft	3.75	@	4.00
Wood Tag Boards	.04¼	@	.06¼
Sulphite Screenings	.03	@	.03¼
Manila Tissue	.07	@	.07¼
White Tissue	.07¼	@	.07½
(Delivered Central Territory)			
News, per ton—			
Rolls, contract	62.00	@	—
Sheets	67.00	@	—
Boards, per ton—			
Plain Chip	30.00	@	35.00
Solid News	32.50	@	37.50
Manila Lined Chip	40.00	@	45.00
Container Lined—			
85 Test	50.00	@	55.00
100 Test	55.00	@	60.00

Old Papers
(F. o. b. Chicago)

Shavings—			
No. 1 Hard White	2.35	@	2.40
White Env. Cuttings	—	@	—
No. 1 Soft Shavings	2.10	@	2.15
Ledger & Writings	.70	@	.75
Solid Books	.75	@	.80
Blanks	1.60	@	1.65
Krafts	1.25	@	1.35
New Kraft Cuts	1.35	@	1.45
Manila Env. Cuts	1.50	@	1.55
Ex. No. 1 Manila	1.25	@	1.30
Print Manila	.40	@	.45
Overissue News	.40	@	.45
Old Newspapers—			
No. 1	.35	@	.40
No. 2	.30	@	.35
Mixed Papers—			
No. 1	.28	@	.30
No. 2	.20	@	.25
Roofing Stocks—			
No. 1	30.00	@	—
No. 2	28.00	@	—

PHILADELPHIA

Paper
(F. o. b. Mill)

Bonds	.05	@	.40
Ledgers	.08	@	.40
Writings—			
Superfine	.12½	@	.18
Extra fine	.18	@	.22
Fine	.17	@	.26
Fine, No. 2	.15	@	.25
Fine, No. 3	.09	@	.20
Book, M. F.	.05	@	.07
Book, S. S. & C.	.05	@	.07½
Book, Coated	.09	@	.16
Coated Lithograph	.07	@	.11
Label	.07	@	.11
No. 1 Jute Manila	.07	@	.09
Manila Sul., No. 1	.03½	@	.05½
Manila No. 2	.03	@	.04
No. 1 Kraft	.05¼	@	.06
No. 2 Kraft	.03⅜	@	.04
Southern Kraft No. 1	—	@	.03¾
Southern Kraft No. 2	—	@	.03½
Common Bogus	.03	@	.04
(Delivered Philadelphia)			
News Print Rolls	62.00	@	—
Straw Board	52.50	@	70.00
News Board	32.50	@	35.00
Chip Board	30.00	@	32.00
Wood Pulp Board	85.00	@	95.00
Binder Boards—			
No. 1, per ton	75.00	@	—
No. 2, per ton	70.00	@	—
Carload lots	68.00	@	70.00
Tarred Felts—			
Regular	55.50	@	57.00
Slaters (per roll)	.84	@	.94
Best Tarred, 1-ply (per roll)	1.95	@	2.10
Best Tarred, 2-ply (per roll)	1.50	@	1.60
Best Tarred, 3-ply	2.00	@	2.25

Domestic Rags (New)
(Price to Mill, f. o. b. Phila.)

Shirt Cuttings—			
New White, No. 1	.09	@	.09½
New White, No. 2	.07	@	.07½
Light Silesias	.07	@	.07½
Silesias, No. 1	.07	@	.09
Black Silesias, soft	.05	@	.05½
New Unbleached	.08½	@	.09
Washable, No. 1	.04½	@	.05
Blue Overall	.07½	@	.08
Cottons—According to grades—			
Washable, No. 2	.03	@	—
New Blue	.03	@	.03½
Fancy	.05	@	.05½
New Black Soft	.05	@	.05¾
New Light Seconds	.02½	@	.03
New Dark Seconds	1.85	@	2.00
Khaki Cuttings—			
No. 1 O. D.	.05½	@	.05¾
No. 2 Mixed	.04½	@	.04¾
Corduroy	.03	@	.03½
New Canvas	.08¼	@	.09
New Black Mixed	.03¾	@	.04½

Domestic Rags (Old)

White No. 1—			
Repacked	4.25	@	4.50
Miscellaneous	3.50	@	3.75
M. G.	6.00	@	—
Thirds and Blues—			
Miscellaneous	1.60	@	1.80
Repacked	2.00	@	2.25
Black Stockings (Export)	3.90	@	4.25
Roofing Stock—			
Foreign No. 1	1.25	@	1.30
Repacked	.80	@	.90

Bagging
(F. o. b. Phila.)

Gunny, No. 1—			
Foreign	1.50	@	1.60
Domestic	1.75	@	—
Manila Rope	3.50	@	4.00
Sisal Rope	1.50	@	—
Mixed Rope	1.10	@	1.25
Scrap Burlaps—			
No. 1	1.50	@	1.60
No. 2	1.10	@	1.20
Wool Tares, heavy	3.00	@	—
Mixed Strings	1.15	@	1.25
No. 1, New Light Burlap	2.50	@	2.75
New Burlap Cuttings	2.00	@	2.25

Old Papers
(F. o. b. Phila.)

Shavings—			
No. 1 Hard White	2.65	@	2.75
No. 2 Hard White	2.30	@	2.50
No. 1 Soft White	2.25	@	2.50
No. 2 Soft White	1.40	@	1.60
No. 1 Mixed	.90	@	1.00
No. 2 Mixed	.60	@	.70
Solid Ledger Stock	1.55	@	1.65
Writing Paper	1.05	@	1.25
No. 1 Books, heavy	1.00	@	1.15
No. 2 Books, light	.90	@	.95
No. 1 New Manila	2.15	@	2.30
No. 1 Old Manila	1.50	@	1.60
Print Manila	.50	@	.60
Container Manila	.45	@	.50
Old Kraft	1.35	@	1.40
Common Paper	.25	@	.35
No. 1 Mixed Paper	.25	@	.30
Straw Board, Chip	.35	@	.40
Binders Board, Chip	.35	@	.45
Corrugated Board	.50	@	.60
Overissue News	.45	@	.50
Old Newspaper	.25	@	.30

BOSTON

Paper
(F. o. b. Mill)

Ledgers—			
Sulphite	.07½	@	.12½
Rag Content	.15	@	.30
All Rag	.38	@	.52½
Bonds—			
Sulphite	.06½	@	.11½
Rag content	.15	@	.30
All rag	.36½	@	.65
Writings	.06½	@	.20
Superfines	.11	@	.31
Book, Super	.06	@	.09
Book, M. F.	.05½	@	.08½
Book, Coated	.08½	@	.18
Coated Litho	.09	@	.12
Label	.09½	@	.15
Jute Manila No. 1	.11	@	.13
Manila, Sul. No. 1	.04¾	@	.06½
Manila, Sul. No. 2	.03¾	@	.04½
No. 1 Kraft	.04¼	@	.05½
No. 2 Kraft	.03¾	@	.04
(Less car-freight to Boston)			
Southern Kraft	—	@	3.35
(F. o. b. destination in carload lots, f. o. b. mill in less than carload lots.)			
Common Bogus	.02	@	.02¾
Delivered New England points			
News Print, rolls	61.50	@	—
Straw Board, rolls	.009	—	@52.50
Straw Board in Sheets, basis 35s to 70s	—	@	50.00
Filled News Board	32.50	@	—
Chip Board	30.00	@	—
Chip Board (Creasing)	32.50	@	—
Single Manila Lined Chip	45.00	@	—
Single White, Patent Coated News Board Bender, No. 1	60.00	@	75.00
Single White, Patent Coated News Board Bender, No. 2	55.00	@	65.00
Wood Pulp Board	75.00	@	80.00
Binder Boards	67.50	@	75.00

Old Papers
(F. o. b. Boston)

Shavings—			
No. 1 Hard White	3.25	@	3.75
No. 2 Hard White	2.60	@	2.90
No. 1 Soft White	—	@	2.40
No. 1 Mixed	.90	@	1.00
No. 2 Mixed	.60	@	.65
Solid Ledger Stock	—	@	1.75
No. 1 Books, heavy	.75	@	.80
No. 1 Books, light	—	@	.65
Crumpled Stitchless Book Stock	—	@	.70
Manila Env. Cuttings	1.85	@	2.00
No. 1 Old Manila	—	@	1.00
White Blank News	1.50	@	1.60
Kraft No. 1	1.00	@	1.10
Manila	.80	@	.90
No. 1 Mixed Paper	—	@	.16
Overissue News	—	@	.40
Old Newspapers	.25	@	.30
Box Board, Chip	.16	@	.20
Corrugated Boxes	.35	@	.40

Bagging
(F. o. b. Boston)

Gunny No. 1—			
Foreign	—	@	1.80
Domestic	1.60	@	—
Manila Rope—			
Foreign	2.50	@	—
Domestic	—	@	3.00
Transmission Rope	2.00	@	—
Mixed Strings	.75	@	.85
Jute Rope	—	@	1.05
Jute Carpet Threads	.90	@	1.05
Bleachery Burlap	—	@	3.25
No. 1 Scrap Burlap	—	@	1.25
Scrap Sisal	1.35	@	1.40
Scrap Sisal for shredding	—	@	1.50
Wool Tares, heavy	—	@	1.40
New Burlap Cutting	1.75	@	2.00
Australian Pouches	2.50	@	—
Heavy Baling Bagging	—	@	1.75
Paper Mill Bagging	—	@	.85
Bagging No. 2	.50	@	—
No. 1 Burlap	—	@	3.50

Domestic Rags (New)
(F. o. b. Boston)

Shirt Cuttings—			
New White No. 1	.06½	@	.07
New White No. 2	—	@	.06
Silesias No. 1	.06	@	.06¾
New Unbleached	—	@	.08
Fancy	.04	@	.04½
Washable	.04	@	.04½
Cottons—According to grades			
Blue Overalls	.06¼	@	.06¾
New Black, soft	.04	@	.04¾
Knaki Cuttings	.04	@	.04¾
O. D. Khaki	.04½	@	.05
Corduroy	.03	@	.03½
New Canvas	.08	@	.08½

Domestic Rags (Old)
(F. o. b. Boston)

Canvas	.04½	@	—
White No. 1—			
Repacked	4.75	@	5.25
Miscellaneous	5.00	@	—
White No. 2—			
Repacked	.04½	@	.05
Miscellaneous	.03½	@	.04
Twos and Blues	2.75	@	3.00
Thirds and Blues—			
Repacked	2.25	@	2.50
Miscellaneous	1.75	@	1.90
Black Stockings	3.65	@	4.00
Roofing Stock—			
No. 1	.90	@	.95
No. 2	.65	@	.70
No. 3	.50	@	.60
No. 4	—	@	.60

Foreign Rags
(F. o. b. Boston)

Dark Cottons	.75	@	—
New No. 1 White Shirt Cuttings	7.50	@	8.00
Dutch Blues	—	@	1.80
New Checks & Blues	4.25	@	4.60
Old Fustians	1.65	@	1.65
Old Linsey Garments	.75	@	.85

TORONTO

Paper
(F. o. b. Mill)

Bond—			
No. 1 Sulphite	.12½	@	—
No. 2 Sulphite	.09¾	@	—
No. 1 Colored	.13½	@	—
No. 2 Colored	.09½	@	.10½
Ledgers (sulphite)	—	@	—
Ledgers, No. 1	.36	@	—
Ledgers, No. 2	.27	@	—
Writing	.09½	@	.10
Book—			
No. 1 M. F. (carloads)	7.50	@	—
No. 2 M. F. (carloads)	7.25	@	—
No. 3 M. F. (carloads)	4.00	@	5.75
No. 1 S. C. (carloads)	8.00	@	—
No. 2 S. C. (carloads)	7.75	@	—
No. 3 S. C. (carloads)	7.50	@	—
No. 4 S. C. (carloads)	6.25	@	—
No. 1 Coated and Litho	13.25	@	—
No. 2 Coated and Litho	12.25	@	—
No. 3 Coated and Litho	10.00	@	11.50
Coated tinted	14.50	@	—
Wrapping—			
Rag Brown	4.95	@	—
White Wrap	5.25	@	—
"B" Manila	5.00	@	—
No. 1 Manila	5.40	@	—
Fiber	5.40	@	—
Kraft, M. F.	5.90	@	—
Kraft No. 2	5.40	@	—
(Delivered Toronto)			
News, per ton—			
Rolls (contract)	61.50	@	62.00
Sheets	67.00	@	—

Pulp
(F. o. b. Mill)

Ground Wood	30.00	@	32.00
Sulphite easy bleaching	50.00	@	—
Sulphite, news grade	70.00	@	—
Sulphite, bleached	72.50	@	75.00
Sulphate	60.00	@	—

Old Waste Paper
(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	2.80	@	—
Soft White	2.60	@	—
White Blk. News	1.50	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.10	@	—
Light and Crumpled Book Stock	1.20	@	—
Ledgers and Writings	—	@	—
Manilas—			
New Manila Cut	1.50	@	—
Printed Manilas	.80	@	—
Kraft	1.90	@	—
News and Scrap—			
Strictly Overissue	.70	@	—
Strictly Folded	.70	@	—
No. 1 Mixed Paper	.60	@	—

Domestic Rags
(Price to mills, f. o. b. Toronto)

No. 1 White Shirt Cuttings	.09½	@	.10
Fancy Shirt Cuttings	.06	@	.06½

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PAPER TRADE JOURNAL
ESTABLISHED 1872

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